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RICHARD H. EDMONDS, President.
THOMAS P. GRASY, Vice-President.
FRANK GOULD, Secretary.
VICTOR H. POWER, Treasurer.

RICHARD H. EDMONDS,
Editor and General Manager.

THOMAS P. GRASY,
General Staff Correspondent.

Branch Offices:
New York—52 Broadway.
Boston—170 Summer Street.
Chicago—505 Fisher Building.

Charleston, W. Va.—ALBERT PHENIS,
Special Correspondent for West Virginia,
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BALTIMORE, JUNE 14, 1906.

The Spalding Company, building supplies and equipment, Atlanta, Ga., A. T. Spalding Jr., manager, in a letter about advertising in the MANUFACTURERS' RECORD says:

Before closing we wish to add that we have found your journal of incalculable value, thoroughly reliable in addresses and detailed information and an amazement of perfect classification, considering that so many diversified subjects necessarily are rushed both daily and weekly to the printers for prompt publication.

NOT IN IT.

New York papers which were apparently astray in other respects in their information about the "Southern States Immigration Commission" of that city announced last week among the members of the "executive board" of the "Commission" Mr. Harvie Jordan, president of the Southern Cotton Association. The MANUFACTURERS' RECORD has received from Mr. Jordan a telegram dated June 7, as follows:

I have no connection, official or otherwise, with Southern Immigration Commission.

Another member of the "executive board" resigned the day after he had been elected. We have no information about the intentions of other announced members of the "executive board."

SOUTH CAROLINA'S RECOVERY.

In compiling, last January, the assessed values of property in the Southern States, the MANUFACTURERS' RECORD, in the absence of official figures for South Carolina, not then accessible, made an estimate of \$219,000,000 for that State. The conservatism of the estimate is indicated by the fact that the official figures now compiled are \$220,224,505.

An interesting feature of the returns of taxable property is the statement that "while the law requires that property should be returned at 60 per cent. of its actual value," it is believed that the figures given "represent not more than 33½ per cent. of the total taxable property of the State." On that basis the true value of property in South Carolina may be estimated at more than \$661,000,000, an amount greater by \$113,000,000 than the true value of property in 1860 and more than double that of 1880. A comparison of the figures of 1860, when the true value was \$548,138,754, with those of 1880, when the true value was \$322,000,000, reveals the immediate loss and subsequent retardation of South Carolina as a result of the war, even eliminating the value of property in slaves, and the comparison of the figures of 1880 and 1905 exhibits the wonderful advance which South Carolina has made in the past quarter of a century. In 1880 the true value of property, \$322,000,000, represented per capita wealth of \$323. The true value of property, \$661,000,000, in 1905 represents a per capita wealth of about \$460.

South Carolina was one of the Southern States most devastated by the war and most hampered by the developments of the subsequent 10 or 12 years. The progress which it has made since the burden was lifted strikingly illustrates the advance made by the whole South, and the figures of the true value of its taxable property suggest the error likely to arise in making comparisons of assessed values in the South in 1860 and in 1905 if it be not remembered that at the earlier date assessed values represented about 75 per cent. of true values and at this time they represent between 30 and 40 per cent. of true values.

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 64, 65 and 66.

NEW PASSENGER STATIONS DEMANDED.

A demand for larger and more modern passenger terminals at important centers is a prominent feature of the railroad situation in the South. Birmingham is to have a fine new station, Memphis is also demanding one, and at New Orleans union-depot plans are under consideration, but they may not be carried out upon as extensive a scale as was at first proposed, owing to the inability of the terminal company and the city government to attain an agreement about certain property. Little Rock and other cities also want union-station facilities, so that some important developments along this line may be expected at least within the next year or so.

The growth of passenger business in the Southern States is enormous. Not so many years ago the South was visited by comparatively few persons for

reasons other than those of business, but now its resorts, both winter and summer, are as well known as those of any other section of our country. Not only from the North and East do travelers in search of health and recreation flee to the Southland, they come from the West as well, and you are as likely to hear the charms of the Carolina and Virginia mountains and of the Florida coast rehearsed in the parlors of Chicago and Kansas City as you are in the drawing-rooms of New York and Boston. The rapidly-flowing streams of travel which this sort of thing cultivates, and which are also enhanced by the frequent journeys of business men in connection with their Southern interests, have increased beyond the capacity of the old-time accommodations, the result being a simultaneous and strong movement to bring about a betterment generally provided.

MAGIC-LANTERN SOCIOLOGY.

Once upon a time a lad, stirred by great ideas for which he knew a waiting world was gasping, determined to enter upon a literary career as a sociologist. The literary market being overstocked in that particular, and hard-hearted, cold-blooded publishers by the gross refusing his wares, he hit upon the expedient of committing suicide for publication. Placing some of his garments upon the river bank and attaching thereto a note pouring out his very inmost soul in despair, he retired to his lodgings and for a couple of days was drowned—in the newspapers. The notoriety thus given him was sufficient to encourage a publisher to float one of his books. He had made the beginning of his literary career. So the story goes.

Something of the same spirit has been manifested in the sociological exposure of methods in Chicago packing-houses, in that there, too, only a beginning has been made. The exposure has been limited principally to the canned-meat or food-products item, and has hardly grazed the fresh meats. It has not pretended to follow the fresh meats through all the horrors they must experience, from the viewpoint of the special investigator, before they reach the human stomach. Mere contemplation of this career of fresh packing-house meats or even of fresh home-butchered meat opens a vista for the activities of horror-mongering sociologizers which certainly should not be neglected.

For illustration, a cut of meat is hung from a hook in the average market-house or placed upon the stall. Perhaps it is covered with a bit of cotton cloth. Perhaps it is not. If it is covered, the cloth in a short time, from mere contact with the meat, is in condition that would not be tolerated in a cloth on a gentleman's table or in a handkerchief for ballroom uses. It is naturally dirty, but still does duty. If it is covered, the cloth in a short time, from mere contact with the meat, is in condition that would not be tolerated in a cloth on a gentleman's table or in a handkerchief for ballroom uses. It is naturally dirty, but still does duty. If the meat is not covered it is exposed to the minute dust, laden with many sorts of horrible germs, blown in from the street or from the pavement of the market where at night gambol rats, among the most approved conveyors of disease, or cats in more or less advanced stages of consumption, or it is the constant prey of poison-laden flies or other insects. Yet the meat subjected to such treatment is bought and is eaten by millions of men, women and children, without a thought of the death menace in them in every mouthful. But such a situation is really hygienic compared with other conditions affecting meat.

One may easily get a thousand professional sanitarians to assert positively that nothing can surpass paper money as a disseminator of disease

germs. That fact is so well recognized that the tellers in strictly up-to-date banks handling thousands upon thousands of bills keep at hand and use frequently a basin of some antiseptic, sterilizer or germicide. But whoever has seen a sterilizer on a butcher's stall or in a green grocery? Where in the world could it be more useful? A customer coming straight from a house where there may be diphtheria, scarlet fever, measles or consumption or cancer buys a piece of beef, hands a dollar bill to the butcher, who places it in the money-drawer with other dollar bills or with metal money that, perhaps, has been in the mouth of a victim of tuberculosis or other ailment, and without even wiping his hands, fingers the piece of meat which he cuts for his next customer, and so on for 12 hours on a stretch. And the same thing goes on at other stalls where are sold fresh fruits and vegetables, handled just as recklessly, and some of them, such as tomatoes, celery, radishes, apples, pears, berries, etc., being taken home and eaten oftentimes without even being washed in cold water. Considering the treatment given such products in their cultivation—and we leave details to social scientists gravitating to Washington—it is impossible to imagine them free from typhoid germs before they reach the market.

But the market or the green grocery are comparatively sanitary, in spite of the presence in them of the millions and millions of frightful germs, compared with the ultimate destination of their meats and vegetables and fruits—the kitchens of thousands and hundreds of thousands of happy homes. How many housekeepers know where or how their cooks or other household servants spend their nights? How many servants ever think of mentioning to their mistresses the little fact that there is contagious or infectious disease at their homes, even if they know it? The greater number of housekeepers suffering servants employ only one to do the general housework, to wash and to cook. In such cases the servant is often called from upstairs work to peel the potatoes or to slice tomatoes, or from the washtub or scrubbing the front steps to prepare the steak for dinner, said preparation consisting principally in washing from the steak any visible dirt, not impossibly the least dangerous foreign matter. Even where the tasks are specialized, as in hotels, the dangers are by no means minimized. For instance, in one of the leading hotels in New York city a dining-room waiter has been seen to wipe his face, moistened by his exertions, with his ever-present arm-towel, and with the same towel to wipe the warm plate to be immediately used by a guest, and that, too, without any proof that the towel, the plate or the waiter's sweat had been sterilized. Again, it is not infrequent in first-class eating establishments for the negro waiters to use their hands unsterilized in fishing out the tiny molds of butter for individual plates or to use the same hands in massing for other molds the remnants of butter left by a hundred guests. Then when one thinks of hash, the fearsome mystery grows. For the psychochimico sociologizer, though, hash is no joke.

Starting with hash, that is to say, public hash, concocted, if the purveyor to public tastes is true to the teachings of economy, from the fragments of the meals of all his customers, whether consumptives, cancerized, scrofulized or other complainants, the young gentlemen who have done such valiant yeoman service in Packingtown should travel along the route here suggested

and prepare some other sociological essays for the national administration. If they have due regard for the imagination of a public that does not think, they can produce a sensation before which their Chicago essays would be rank insipidity and induce a government organization that would make a laughing-stock of a few thousand inspectors of canned meats. Their program should include the following broad principles, every one of which could be put into effect under the interstate commerce law:

In the cultivation of vegetables or fruit for human consumption no fertilizer shall be used, even guano, save a fertilizer made of wood ashes, of phosphate rock or other mineral product. Congress shall be authorized to provide from the United States Treasury a sum of money sufficient to pay the 6,000,000 inspectors, one for each farm or market garden in the country, required to enforce this law.

No butcher shall slaughter any animal intended for human food if said slaughtering involves the drawing of blood from the animal, and unless said butcher is dressed in broadcloth clothes, patent-leather shoes and kid gloves, which, together with every instrument used in the slaughter, shall have been previously sterilized. Congress shall be authorized to provide from the United States Treasury a sum of money sufficient to pay the 200,000 inspectors necessary to enforce this law.

No person in a private family, a hotel, boarding-house, restaurant, eating-house or other place of public entertainment shall be permitted to prepare food for eating without having previously been given a certificate of perfect health from the proper physician, without having been treated to sterilizing bath and without being clothed in germproof garments. Congress shall be authorized to provide from the United States Treasury a sum of money sufficient to pay the 20,000,000 inspectors required to enforce this law.

No paper money shall be permitted to pass from one hand to another in trade or for other purposes without being given sterilizing treatment. Congress shall be authorized to provide from the United States Treasury a sum of money sufficient to pay the 40,000,000 inspectors required to enforce this law.

Enforcement of such principles will give steady and permanent employment to 60,000,000 or 70,000,000 individuals at the expense of the government, for which the rest of the people of the country, numbering 15,000,000, and principally infants, will pay the bills. The 60,000,000 or 70,000,000 inspectors will probably include all of the psychochimico sociologizers of the country. But should this not happen, the remedy will be at hand in another principle—no sociologizer shall be allowed to practice unless his manuscript or other weapons be declared free from all germs except the germs of absolute truth. Half a dozen inspectors might be provided to carry out that provision, which would rule out the Topsy's who "find things," but it is feared that qualified inspectors for this task could hardly be found outside the precincts of lunatic asylums if present tendencies are not corrected. The moral of all this may be emphasized by the details of a couple of incidents.

Once upon a time an amateur sociologizer undertook to dress his first chicken. He was under disadvantages, to be sure; he had never taken a college course in social science, and had not even engaged in uplift work in a social settlement. Hence he was excusable

when, coming upon the chicken's glazard in all its iridescence and moisture, he threw the fowl away and cried, "This thing's diseased."

About 25 years ago a woman of rather positive character took her husband to a lecture designed to prove the deleterious effects of tobacco upon the human system. Her husband enjoyed at that time a couple of cigars a day and perhaps a chew of tobacco now and then. The lecture consisted largely of magic-lantern views of the human internals. Now, they ain't pretty things, anyhow. So, when upon the screen was thrown a highly-colored alleged picture of the interior of the human stomach, magnified fifty times, it was not surprising that the lady in the case right then and there turned to her husband, and, forgetting or not knowing what a sight a perfectly respectable stomach, even untouched by tobacco, would make of itself under the circumstances, she said: "You quit smoking from this moment!" And he did.

He was one of the earliest victims in this country of what may be called magic-lantern sociologizing—eclectic exaggeration of the exceptional in conditions for the benefit of individuals subject to hysteria or temporary insanity, or seeking to stir the public with an intent yet to be disclosed.

In the meantime, isn't it about time for the American people to quit hysterics as a daily diet.

LABOR-SAVING IN SOUTHERN INDUSTRY.

Two advertisers in this week's issue of the MANUFACTURERS' RECORD call attention to the fact that the increasing scarcity of labor must be overcome by improved labor-saving machinery.

The point which these two concerns make is one that the leading business people of the South have already commenced to see and are acting accordingly. For instance, in the old hand method of filling furnaces in the iron districts of Alabama 25 to 30 men were needed to each furnace. The scarcity of labor is bringing about the introduction of automatic filling methods in which three to five men do the work formerly done by 25 to 30.

In the cotton mills improved machinery is accomplishing similar results. The leading phosphate concern of the South up to four years ago was mining all of its phosphate rock by hand labor; today it has 20 to 25 steam shovels doing what formerly it took many hundreds of hands to do; and so throughout the entire South, not only in manufactures and mining, but in agriculture as well, improved labor-saving machinery is coming to the front. Men are learning to do things with a fewer number of hands. Inventive skill is being developed, and out of the labor scarcity from which we are now suffering there will be developed a greater skill in the utilization of better methods and better machinery and more modern and economical ways of doing everything possible by machinery formerly done by hand labor.

The farmer will use better agricultural implements; the merchant will use better methods of handling and storing his merchandise; the stevedore will, to a large extent, give place to machinery in ship-loading; the wasteful methods of many old boilers will result in the adoption of new ways of securing power; electricity will come into play more largely than ever; the internal-combustion engine, the producer-gas plant, the utilization of water-power for electrical transmission and other modern methods of developing

cheap power will take the place of many present extravagant systems. Everywhere throughout the South there will be a quickened stimulation of the inventive brain of the manufacturer and the skilled mechanic to create new ways of doing things, and everywhere there will be a greater demand for the most modern labor-saving machinery. Heretofore, with a surplus of cheap labor, some furnace people have claimed that it cost less to fill a furnace by hand with 25 to 30 laborers than to put in an automatic filling device which would require only three men to handle. Some have thought traveling cranes, the best systems of power development, the most advanced lines of machinery of other kinds were not needed where labor was so cheap, abundant and tractable as in the South a few years ago. But all this has changed.

A revolution is coming about, and out of this present scarcity of labor will come one of the greatest blessings to the business life of the whole South, for this blessing will be a quickening of latent talent, a discarding of wasteful methods, a throwing into the scrap heap of a vast amount of poor machinery and a re-equipment with the most modern labor-saving devices of every character. The present scarcity and high price of labor will, therefore, prove not an injury, but a blessing. Temporarily it may interfere with some enterprises and lessen the output of the cotton fields and the cotton mills and the iron furnaces and the coal mines, but it will soon develop such a mental activity and such a reconstruction of methods as to put the South alongside of the most progressive sections of the world. And the Southern man who is studying these matters naturally looks to the advertising pages of the MANUFACTURERS' RECORD for inspiration and help in showing how to accomplish these results and where to buy the needed labor-saving machinery and devices.

BOARDS OF TRADE.

A letter from an executive officer of a board of trade recently organized in a Northern city asking the MANUFACTURERS' RECORD for advice as to the best means of doing effective work has started a train of thought which may be of value to new bodies of the kind in the South, and not without suggestion to older ones.

A board of trade or similar organization intended to organize and concentrate the creative energies of a community upon its development and expansion will be useful just in so far as its membership regards it as a vital factor in the city's life and employs it as such. An organization intended to do the work of a board of trade and not doing it is worse for the city than having no board of trade. It becomes a clog upon the wheels of a city's growth.

This is the day of doing things, a day in which the city that does not advance its interests must surely decline in importance. An active, alert body of business men and manufacturers united in a board of trade and sustaining liberally intelligent and energetic work of its executive officers is one of the most reliable forces for a city's growth. It will not do for progressive citizens under the spur of a calamity or of a special opportunity merely to meet, adopt a constitution and by-laws, elect a president, secretary and treasurer of their board of trade, pay the annual dues and then

give practically no further thought to the organization except as their attention may be called to it by an annual meeting and banquet or some other passing incident. There are not a few boards of trade of that character in the country already. They mean principally the payment of an annual salary to some officer or another, if, indeed, they may not have been organized for the purpose of creating a salaried position for some one whom the community must care for. Such a board of trade can only be a drawback upon a city. Its management is pretty certain to become a center for the propagation of business dry-rot or to fall into the hands of thrifty individuals using their positions to advance personal interests involving even a direct or indirect dividend from funds set apart for the advertisement of a city's advantages, or wittingly or unwittingly being used for the cultivation of fads or schemes of one kind and another, and, being regarded by the uninformed of other cities as representative of a city, is likely to lead business men to neglect that city when they are contemplating investment of capital in industry for trade.

On the other hand, there are boards of trade that are dynamos of community effort and achievement. An organization of that class is a business organization and is conducted just like any other successful business. Its active officer, usually the secretary, is a man chosen for his special aptitude, his knowledge, his quality as a mixer and his power of initiative. He must be, of course, well acquainted with the men of his city, with its accomplishments and with its resources needed for further accomplishments, and must be ready at all times to give prompt and definite information to seekers for facts about the city with expectation of landing an investor of money or some individual with fresh ideas or enterprise promising to add to the city's equipment for progress. He must keep in close touch with all the active members of the board of trade in the purpose to be of service to them in their individual lines, and in such activities must give reason to all other qualified men of the community for becoming members of the board. Local conditions and circumstances will naturally be elements to be considered, but the secretary, to be successful, must turn conditions and circumstances to good account rather than to permit them to control him. He must be the victor instead of the victim of circumstances. He must lead the members of the board of trade to treat it as a great clearing-house of information and inspiration for themselves, and, in thus showing forth their faith, to induce equally aggressive men from other parts of the country to cast in their lot with them.

ANSWERING LETTERS.

A resident of a Georgia town who wrote to the MANUFACTURERS' RECORD under date of May 1 is doubtless harboring a grievance against us. The letter was one of about a thousand letters a day received by the MANUFACTURERS' RECORD, each of which is answered promptly where a reply is called for or is possible. The particular letter of May 1 was of a confidential nature. It came from some one seeking a position and asking our advice on that point. It has not been answered because it had no signature. Its confidential nature forbade any publication of it sufficient to put its author on its trail, and mention of it is made now only for the pur-

pose of emphasizing the necessity for business methods in business correspondence, the lack of which is frequently brought to the attention of the MANUFACTURERS' RECORD. It is a matter of frequent complaint on the part of business men in other parts of the country that business letters to the South, letters looking to participation in the development of that section, are given no attention at all by their recipient or have such tardy treatment that the correspondence is for naught. It is not that the letters are not delivered. Return envelopes insure against such a failure. It is not that they are not worthy of consideration. They are of most practical intent, and not infrequently in reply to letters seeking information and requiring, in accordance with ordinary courtesy, acknowledgment. Carelessness in this particular is not universal in the South, nor is it confined to that section. Reference to it is made here merely because in some quarters a fault of any kind is given much greater importance if it appears in the South than if it appears in any other part of the country.

GREATER WHEELING.

In its issue of June 8 the Wheeling Register devoted 24 pages to an exposition of the immense river interests, the splendid railroad facilities, the trolley system reaching three States, the manufacturing importance, the banking business and other lines of activity in the thriving Greater Wheeling, W. Va., together with terse but significant statements of the mineral, timber and agricultural resources of West Virginia. The special issue is in itself a confirmation of the Register's statement that "it makes some rubbing of the eyes an absolute necessity before the old-time Wheeling man, particularly if he has been absent for some time, can fully grasp the metamorphosis which has taken place here in even the last few years. And yet it is but a prelude to what is to come."

THE COTTON MOVEMENT.

According to the report of Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, the amount of cotton brought into sight during the first nine months of the present season was 10,393,403 bales, a decrease under the same period last season of 1,870,042 bales; the exports were 5,939,597 bales, a decrease of 1,666,981 bales; the takings were, by Northern spinners, 2,176,866 bales, an increase of 96,471; by Southern spinners, 1,916,640 bales, an increase of 77,798 bales.

IN THE BIRMINGHAM DISTRICT.

Alabama Iron Producers Not Disturbed by Waiting Policy of Consumers.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., June 11.

Some few sales of iron are now being made here, but they are in small lots and give signs that consumers are only buying for immediate wants. The waiting policy on the part of the larger consumers, anticipating that quotations will take a drop, has not disturbed the Alabama producers as yet, and though rumors prevail that some manufacturers have been selling under \$14 per ton No. 2 foundry, there is no ascertaining the source of such iron. The larger concerns in this section are maintaining \$14 per ton No. 2 foundry as the basis, and so far there has been no reason why this price should be shaded in the least. The production is at the low ebb, the repairing of furnaces in this district being given every consideration. Six furnaces in the Birmingham district are producing basic iron, no little attention being given to the steel output. The demand for steel is strong, and there are no indications of a cessation of this demand for many months to come. One furnace

in this district is on charcoal iron. Seven furnaces are undergoing repairing, two of them to be ready for the torch before the expiration of this month.

The production being light, even though the demand be quiet, there is not likely to be any accumulation of the product for some time to come. The yards in this section are practically bare, and shipments are equal to the production. The following quotations are given: No. 1 foundry, \$14 to \$14.50; No. 2 foundry, \$14; No. 3 foundry, \$13.50; No. 4 foundry, \$13; gray forge, \$12 to \$12.50; No. 1 soft, \$14.50; No. 2 soft, \$14.

In the steel market there is great activity, but mention has been made of this before.

The Tennessee Coal, Iron & Railroad Co. has sold up to October next year on steel rails. The plant at Ensley is to be given every attention. If rumors are to be believed, the Tennessee Company will make effort to increase the capacity of the plant by adding thereto in more than one department. Recent purchases of land in the vicinity of Ensley-Wylam and a short distance from Pratt City indicate that this company proposes some extensive development. Frank H. Crockard, vice-president and general manager of the Tennessee Company and vice-president and general manager of Alabama plants for the Republic Iron & Steel Co., has gone to New York to attend a meeting of the directors. During the past two weeks Mr. Crockard has been making a thorough inspection of plants and giving no little attention to the affairs of the general office in Birmingham and the Birmingham district, and he goes to the meeting of the directors well loaded with information concerning conditions and what could be done when steps are taken looking to immediate development.

Many rumors have prevailed since the change in the directory of the Tennessee-Republic Company as to immense development proposed in this district. That new mines are to be opened in the Pratt-Ensley division is not doubted. Foreign labor is being secured through the port of New Orleans, a labor agent being stationed in New Orleans, and it is intended to increase the output of coal. The rumors, however, include, besides big additions to the steel plant, if not a new steel plant altogether, two or more blast furnaces and rolling mills. Mr. Crockard, when seen during the past week and asked as to what would be done in the way of developments by the Tennessee-Republic Company in the Birmingham district, stated that he could not say as yet, but intimated that there would be considerable "doing" in the near future.

The annual convention of the United Mine Workers of America, Alabama District No. 20, is in session in Birmingham, President Ed. Flynn presiding. The convention is for the purpose of electing officers for the ensuing year and to arrange a new wage scale. The report of the president of the district organization recommends a continuation of the strike which has been on at the mines of the furnace companies (except Alabama Consolidated Coal & Iron Co.) since July 25, 1904. The report of the secretary-treasurer of the district organization shows that \$409,000 was expended from May 1, 1905, to April 30, 1906, on account of the strike. Standing committees were named. Edward Flynn was re-elected president; B. L. Greer, colored, vice-president; J. L. Clemo, secretary-treasurer; W. R. Fairley, Alabama member of the national board. The wage-scale committee will report to the convention proper towards the end of the week, and on Monday next the joint conference between operators and miners will be held. An invitation has been extended to all operators to attend this conference. The commercial coal

operators in Jefferson county, with one or two exceptions, deal with the union miners. The belief is expressed that the same contract that is in existence now and has been for nearly three years will be readopted. The State mine inspector has served notice on the union miners that the mining laws of the State will be strictly enforced, and in making new rules under the new contracts he offers a number of rules which must be adopted. These rules relate to "shooting" in coal and the use of dynamite. Permission must be given for the use of dynamite in "shooting" coal hereafter. The strike has cost the union miners more than a million dollars in the two years that it has been on.

BUILDING AT NEW ORLEANS.

Ten Million Dollars' Worth of Construction Now Under Way.

[Special Cor. Manufacturers' Record.]
New Orleans, La., June 9.

Records of the Mechanics, Dealers and Lumbermen's Exchange show that New Orleans is just now in the midst of the greatest building boom of its history. The work actually under construction amounts to about \$10,000,000, and if several of the larger buildings which are projected, and work on which will begin shortly, are considered, the value of the buildings now under construction will reach about \$14,000,000. Some of the most important buildings, with their cost, are given in this list:

American Sugar Refinery, \$3,000,000; Maison Blanche, 15 stories, \$1,500,000; Grunewald Hotel, 12 stories, \$1,000,000; New Denechaud Hotel, nine stories and basement, \$500,000; Touro Infirmary annex, \$300,000; Canal-Louisiana Bank, 10 stories, \$350,000; Athenaeum for Young Men's Hebrew Association, \$175,000; Perrin Theater, Baronne street, \$125,000; five-story double-arcade building in Baronne street, near Lafayette, \$60,000; five-story building adjoining, \$30,000; Brooks' winter garden, \$75,000; John Deer Plow Co., \$60,000; Revere Rubber Co., \$25,000; Abbott Cycle Co., \$25,000; Baldwin Theater, \$100,000; Consumers' electric powerhouse, \$175,000; Gulf Bag Co., \$50,000; Fairbanks Scale Co., \$75,000; Consumers' electric six-story building, \$75,000; Elks' Club annex, \$50,000; Senses Hospital, \$75,000; American Can Co., \$125,000; Charles Kaufman Company annex, \$90,000; Newman Industrial Training School annex, \$25,000; First Methodist Church, \$50,000; G. Pitard's Sons hardware store annex, \$10,000; Woodward, Wight & Co. warehouse, \$12,000; German Protestant Church, \$25,000; Beauregard Furniture Co., \$800; Cumberland Telephone & Telegraph Co. building, \$12,500; Peerless Bakery, \$16,250; Terminal Company shed, \$20,000; New Orleans Railway & Light Co. power-house, \$30,000; Commercial Bank building, \$25,000; Third District Bank, \$11,450; 280 residences, \$936,700. This gives total of \$9,386,900. To these may be added: Public library, \$175,000; three branch libraries, \$75,000; new courthouse, \$1,000,000; Audubon Hotel, \$3,000,000; Union depot, \$125,000; New Orleans Auction Exchange Building, \$40,000. This gives a total of \$13,801,900.

A building, the construction of which was assured today, is the New Orleans immigrant station, the erection of which is more than a matter interesting to contractors. This station was projected more than a year ago, when the federal authorities agreed to establish a station here provided a suitable building were erected. The railroads took the matter up, but conflicting interests delayed its construction. A conference between the Belt Railroad Commission and the Southern Pacific officials held yesterday agreed upon a plan, which will be ratified with hardly an

amendment at a special meeting of the Belt Railroad Commission next week. This agreement entitles the Belt Railroad to the right of way for two tracks through the Southern Pacific yards, and the Southern Pacific gains thereby the good-will of the Belt Commission and the Dock Board when it shall apply for a renewal of its franchises on the river-front, which expire within four and a-half years. The Southern Pacific also agrees to reconstruct its old passenger station at the ferry landing at a cost of \$15,000, and Commissioner Frank P. Sargent of Washington, who is here today, has assured the Southern Pacific that the plans which it has prepared will be acceptable to the bureau for an immigrant station. Superintendent E. B. Cushing of the Southern Pacific has assured the city and State, which have manifested keen interest in the construction of the station, that it will be ready for use by August 1, 1906. The settlement of this controversy of long standing has been received with great satisfaction, especially in view of the general agitation for a greater volume of immigration through this port and the announcement that the North German Lloyd Steamship Co. would establish a line of immigrant ships to New Orleans.

During his stay here today Commissioner Sargent urged that Louisiana direct its efforts at immigration especially to securing the settlement of Italians here. On account of climatic conditions, and because of the large Italian population in Louisiana, he said that this State was in a position to secure Italian immigrants with greater ease than immigrants from other countries could be obtained, and on account of fruit-growing being a profitable industry of the South the Italian element, he thought, would be a valuable addition to the population of the South. Mr. Sargent strongly endorsed the movement to have Louisiana establish immigration agencies in Europe, pointing out that other States had been successful by using such methods of promoting immigration.

BUILDERS' EXCHANGE EXHIBIT.

Formal Opening of the Display of Structural Materials.

The opening of the department of the Builders' Exchange of Baltimore, on the Builders' Exchange of Baltimore, on June 11 by what was known as "architects' night" was marked by an enthusiastic endorsement that means success in its every feature. Architects were present from Baltimore, Washington, New York and other nearby cities and towns, and the interest which they showed in the various exhibits, coupled with their promises of support, were very gratifying to the inaugurate of the exposition.

The fact was impressed upon the attending architects that every exhibit was in itself a silent salesman, and that whenever they desired to visit the department with their clients no agent of any exhibitor would importune them to purchase their particular wares, but that they would be free to come and go unmolested.

The principal address of the evening was delivered by Mr. Glenn Brown of Washington, secretary of the American Institute of Architects. Others who spoke with encouraging words for the project included E. Clay Timanus, mayor of Baltimore; Calvin W. Hendrick, chief engineer of the Sewerage Commission; J. B. Noel Wyatt of the architectural firm of Wyatt & Nolting and president of the Baltimore chapter of the American Institute of Architects, and William W. Emmart of the architectural firm of Ellicott & Emmart and president of the Architectural Club of Baltimore.

The committee in charge of the exposition is composed of Albert D. Klein of J.,

chairman; Theodore F. Krug, F. S. Chavannes, Walter E. Burnham and Frank G. Boyd.

The success of the exposition is due in no small part to Mr. I. H. Scates, the manager in charge, who has been indefatigable in the promotion of the project.

The collection includes every kind of material entering into the construction of modern buildings, and includes exhibits from the following firms: Chesapeake Iron Works, Dietrich Bros. and G. Krug & Son, structural and ornamental iron and steel work; National Hydraulic Stone Co., Baltimore Header-Bond Co., Enterprise Cement Block Co. and Standard Stone Co., concrete building blocks; Jos. B. Dunn & Sons, mantels, grates and tiling; C. F. Meislahn & Co., C. J. Benson & Co. and Otto M. Brau, interior decorators; Chamberlin weather strip; Chesapeake & Potomac Telephone Co.; C. D. Pruden Company, Wm. A. Finglas and Charles A. Hicks, sheet-metal manufacturers; Monitor Steam Generating Manufacturing Co. and Monarch Heating Co., heating systems; Baltimore Sash & Door Co. and J. L. Gilbert & Bro., mill work; the Enos Company, electric-lighting fixtures; Stewart-Crook Hardware Co., builders' hardware; National Building Supply Co. and Maryland Lime & Cement Co., all kinds of building supplies; Stanley hod elevators; E. L. Parker & Co. and W. C. Nimmo & Co., tinplate; American Pulley Co., sash pulleys; Expanded Metal & Corrugated Bar Co., reinforcement for concrete; General Fireproofing Co., Dufur & Co., ornamental iron and wire work; Maryland Parquetry Co., hardwood floors; Hilgartner Marble Co., interior marble; S. H. Calkins Co., tiling and mosaics; Impervious Product Co., asphalt and coal-tar products; Henry Seim & Co., paints and glass; Consolidated Gas, Electric Light & Power Co., gas and electric heating and lighting appliance; Albert D. Klein of J., bricks; Patapsco Supply Co., decorators' supplies; Wallace & Gale, asbestos products; James Robertson Manufacturing Co., sanitary specialties; Baltimore Retort & Fire-Brick Co., Warren-Ehret Company, roofing, and the Baltimore Paving & Contracting Co., paving materials.

New Orleans Drainage and Sewerage

The twelfth semiannual report of the Sewerage and Water Board of New Orleans shows that at the close of 1905 the drainage system as then constructed included 20 miles of lined and covered canals, 3 miles of wood-lined canals and 17 miles of open and unlined canals, with the central power station and 7 pumping stations, with space in all of them for additional machinery or pumps except station No. 6, which has its full complement of pumps. There was completed about 44 per cent. of the system as originally designed in 1895, and left to be constructed 26 miles of lined and covered canals, including the Napoleon-avenue system and the Broad-street canal, with 8½ miles of wood-lined and 25½ miles of open and unlined canals, about 60 miles in all, and additional power units at the central power station and pumps at the several pumping stations.

The sewerage system is separate from the storm-water or drainage system. At present 191.8 miles of sewers have been placed under contract, and of this number, practically 160.4 miles have been built. Pumping stations are well under way, and it is expected this month for it to be possible to have the connections from the houses to the sewers started for discharge into the river. The plans contemplate a total of 400 miles of sewers to be completed by the end of 1908, so that all premises within the built-up portions of the city may be connected with the sewers as rapidly as possible.

It is interesting to note the rapid strides making in the application of refrigeration to the preservation of food products and the consequent improvement of market conditions for the mutual benefit of consumer and grower.

COLD STORAGE.

By F. A. LINCK, Southern Manager of the Frick Company of Waynesboro, Pa., Atlanta, Ga.

[Written for the Manufacturers' Record.]

To commence, I will say my comments and suggestions on the subject of cold storage are based on personal experience covering a period of 20 years in the business of supplying machinery and equipments adapted to cold-storage houses and ice factories.

The result of past experiences in the equipment of cold-storage houses shows that no assurance of commercial success is possible without having the refrigerating machinery and apparatus adapted in all respects to the requirements of the contemplated duty and all of the details of the best construction throughout.

Combining an unreliable equipment of refrigerating machinery with lack of organization in the management and operation and poor business methods are sure preventives of the success of the most favorably located cold-storage business.

The attention of the South is called to the possibilities of cold storage as a business that promises wonderful developments and most profitable returns on effort and capital invested.

With the successful development of refrigerating machinery and apparatus during the past 20 years for securing and maintaining the low temperatures required for the preservation of perishable food products, together with the improvements in construction and insulation of cold-storage houses, eliminates all risk in securing the essential conditions with the greatest economy.

The machinery and apparatus which are at present available enable the maintenance of uniform temperature at such point as is necessary to preserve the goods stored throughout any period that may be desired.

In the building and equipment of a cold-storage house, whether independent or in combination with the manufacture of ice, it is a matter of greatest importance, from an economic standpoint, that the insulation of floors, ceilings and walls should be adapted to the temperatures intended to be maintained, and that it be applied so as to insure the least transfer of heat.

Defective insulation is a never-ceasing and useless drain upon the machinery and apparatus for producing the low temperatures in the storage-rooms.

The details of operating the machinery and apparatus of the refrigerating system to secure and maintain the temperatures best adapted to the preservation and marketable condition of the goods in cold storage, as well as general methods of conducting the business to secure the best results and greatest commercial success, are in the hands of the personal management and are governed to some extent by the local conditions.

Cold storage is rapidly gaining in favor and becoming of more and more importance in the industrial world. Carefully-developed and scientific principles covering the construction and operation of cold-storage warehouses have eliminated the risks of failure.

The business of cold storage in connection with the manufacture of ice in the South has greater possibilities than any achievements in recent developments of Southern industry.

It is interesting to note the rapid strides making in the application of refrigeration to the preservation of food products and the consequent improvement of market conditions for the mutual benefit of consumer and grower.

There is a growing demand for fruits of all kinds throughout the civilized world. Fruits are becoming staple foods in countless homes where formerly they were luxuries, and the present demand has developed with the rising standard of life largely within the last generation.

The danger of so-called "overproduction" is greatest in an industry when no provision is made to equalize the distribution of the products throughout the year.

While the majority of the people of the world are still undersupplied there can be no overproduction, and when man masters the art of handling the temporary surplus and of converting it into a steady uniform supply to an increasing number of people the industry becomes safe and attractive.

The cold-storage business is the reservoir in which the temporary surplus is placed and from which it may be distributed in time of greater need throughout the year. The cold-storage business is destined to equalize the distribution of fruit and to increase the demand for them, both in domestic and in foreign markets.

It holds the same relation to the fruit industry that the great warehouses bear to the older cotton, tobacco and grain industries.

Cold storage is tending to raise the standard of fruit-growing, emphasizing the importance of physically perfect, well-developed fruit.

The enviable reputation of the apples of New England for splendid keeping qualities is due in a large measure to the cool weather at the harvest time, causing the fruit to reach the market in good condition.

The fruit of the warmer fruit belt like Virginia, Kentucky, Georgia and the Carolinas, where it ripens in hot weather, is at a disadvantage unless provision be made for local cold storage.

The best varieties of the South, when placed in cold storage as soon as the fruit is picked, equal those of the North in keeping qualities.

Cold storage is already exerting an important influence on the development of our export trade by providing a longer season of distribution.

In the matter of food preservation in cold storage the South has the greatest possibilities in the extension of the egg and poultry business.

Owing to the natural conditions existing in the South and freedom from sudden extremes of hot and cold weather, the egg and poultry industry flourishes with the minimum of care and least risk of most profitable returns.

By the establishment of local cold-storage houses, serving as reservoirs for the preservation of such surplus as may be indicated at certain times in the year by the relative low prices offering in home markets, the supply may be made uniform and thus furnish an increasing number of people throughout the year both at home and abroad, besides making the business more attractive and profitable.

The many opportunities for developing and extending the business of cold-storage warehousing may be indicated in a general way, in addition to the lines we have just mentioned.

The preservation of fresh and cured meats, fish, milk, butter, vegetables, nuts, wines, beer, and, in fact, any perishable article of commerce.

The combination of the cold-storage house with the ice factory is particularly well adapted to the smaller towns of the South, where the possibilities of local

trade would not support a special cold-storage warehouse.

Where the cold-storage rooms are refrigerated in combination with the manufacture of ice it is necessary to the success of the plant that the equipment shall be adapted to securing the temperatures best suited to the preservation of the goods intended to be stored and maintaining the same with the greatest economy and efficiency with the least interference with the manufacture of ice at the same time in the ice-making apparatus.

In the consideration of the requirements of a cold-storage house the planning of rooms and the arrangement of refrigerating apparatus should be in accordance with requirements of the anticipated business.

The amounts, kinds and temperatures required, as well as the probable dates for receiving, duration of storage periods, also the adaptability of extensions to specific requirements with least change in regular arrangements, should not be overlooked in designs of buildings, and all have the fullest consideration in the arrangement of the refrigerating system.

The United States Department of Agriculture has been making a series of experiments on the cold storage of fruits and food products, as well as the preservation of seeds that are subject to damage by weevil, etc., all of which is of particular value in connection with the fruit-growing and cold-storage business. The results of these experiments are available, we understand, to all who are interested by application to members of Congress.

ACTIVITIES IN THE KNOXVILLE SECTION.

[Special Correspondence Manufacturers' Record.]

Knoxville, Tenn., June 9.

In the course of a brief visit to Knoxville I have found evidences of great growth and development in the city and throughout this entire section. In the way of development of coal and timber properties, of marble quarrying and zinc and iron mining there is an activity of the most interesting kind, which is being recognized by the construction of a very large additional railroad mileage, both on the part of old-established railroads here and by companies of recent organization. I find a large degree of enthusiastic optimism among the people here as to the future of this section.

In a talk I had with Mr. J. L. Boyd, manager of the sales department of the Procter Coal Co., I was much impressed with the enthusiasm with which he discussed the present situation and the future possibilities. As representative of a widespread belief which the people of this section entertain, I asked Mr. Boyd to reduce his statements to writing. This he kindly consented to do, and has given me, as the result, the following statement embodying his views and beliefs:

"The rapid progress of the past few years particularly and the good results following investments made have attracted more capital and greater energy and the consequent employment of boundaries of mineral and timber resources hitherto untouched.

"It has long been known that the Appalachian or Cumberland range of mountains carried a wealth of bituminous coal and hardwood timber, but not until a few years ago was it developed that it is more extensive in area and of greater value than anyone had ever anticipated.

"These immense coal fields of millions upon millions of acres, extending from Southwestern Virginia on the east to the Cumberland Plateau in Tennessee on the south and west, cover part of some and all of others of the counties of Lee and Wise in Virginia, Harlan, Letcher, Leslie, Clay, Bell, Laurel and Whitley in Kentucky, and Claiborne, Anderson, Campbell, Scott, Morgan and Roane in Tennessee, and is conservatively estimated to be the largest body of unbroken and substantial coal-producing lands in the United States.

"Some idea of the vast yield and value of this section is suggested by the fact that its coal measures pervade the entire boundary and are continuous from one end of the territory to the other, from three to six separate veins or seams above water-level, averaging in thickness from three to eight feet, aside from the minor deposits, running uniformly through the entire region. It is estimated that from the boundary described, with railroad construction that is feasible, in addition to

the lines already constructed, more coal and better coal can be produced than can be secured from any other continuous bituminous territory in the world.

"While the two great railway systems of this section and the South, viz., the Southern Railway and the Louisville & Nashville Railroad, with all their energy, are unable to keep pace with the growing requirements, the coal fields are scarcely touched, as will be shown by the fact that at present less than 100,000 acres, or hardly one-hundredth part of this immense territory, are actually under development. Reference is here made particularly to the area of which Knoxville is the commercial center; otherwise the adjoining counties of Knott, Breathitt and Perry, of which Louisville, Ky., is the distributing center, might be included, and which would materially increase the unlimited field described.

"Much of this vast area is yet owned by early settlers and natives of the respective counties who do not know the real value of their holdings. As late as five years ago some of these lands were purchased as low as 50 cents per acre. The present price, however, ranges from \$3 to \$50 per acre, according to the location, accessibility to railroads constructed and the opinions or estimates of the owners.

"Mining operations in the Southwestern Virginia district, or 'Stonega' district in Virginia, the Middlesborough district in Tennessee and Kentucky, the Jellico district in Tennessee and Kentucky—which latter district produces the famous Jellico domestic coal—the Coal Creek district in Anderson county, Tennessee, are at present producing and marketing approximately 5,000,000 tons of coal per annum.

"So far the production of coke is confined to a few operations in Southwestern Virginia and two or three in Tennessee, the most important, however, being the Stonega Coke & Coal Co. of Stonega, Va., whose daily output is approximately 75 cars, in addition to its shipments of coke. The value of this coke, both for furnace and foundry purposes, is not excelled by any other, not even the Connellsburg coke, which has heretofore enjoyed the preference of the ironmasters. Indeed, it is reliably stated that the 'Stonega' coke now commands a higher price than the Connellsburg, which should offer reliable evidence of its merit. It might be properly asked why, with the millions of tons of capable coal, the coke production is so limited. The answer is lack of capital—capital for further coal development; capital for building coke ovens; capital for the construction of branch railroads necessary for the most advantageous locations, the construction of which is altogether practicable.

"In addition to the possible coal yield, it is believed that the region described offers the greatest supply of hardwood timber of every kind that can be found in the Union. But the timber reserves are not confined to the coal-bearing lands alone. The great Smoky mountains, 60 to 70 miles southeast of the Cumberland Range and from 30 to 40 miles in the same direction from Knoxville, Tenn., is mainly a virgin forest, while the valleys intervening—through which flow the French Broad and Holston rivers, together forming the Tennessee river—are supplying the material that has made Knoxville and all East Tennessee famous as a manufacturing center for hardwood mantels and furniture of every description, and which finds sale in all markets of the United States.

"With all the native alertness of the characteristic East Tennessee, it devolved upon our Eastern friends, with their capital and their energy, to find and develop in this section of the State the famous Tennessee marble, which now enjoys not only a national but a world-wide reputation as the standard of excellence and beauty for both interior and exterior decorations and for substantial structure material.

To such proportions has the demand grown that the shipments of marble to the East, North and Northwest constitute a large volume of railroad traffic from this section.

"Iron for farming purposes and even for war necessities was produced from the ores found at many points in this territory long before and during the Civil War, but it probably never occurred then that the quantity and quality of the red, brown and manganese ores here would justify the now common prediction that East Tennessee, and Knoxville, Tenn., particularly, is to become the iron center of the South. A beginning has been made in that direction. Already there are five successful furnaces within a short distance of this East Tennessee metropolis. With the easily accessible coal, coke, ore and limestone in such abundance and of such quality, and with all other conditions favorable, the prophecy that Knoxville would yet be the 'Pittsburg of the South' will soon be realized.

"The mining of zinc ore and the reduction to metal is under way, and will, as soon as necessary equipment can be provided, become an important industry, preparations being now under way for large operations.

"Twenty-five years ago copper ore was mined in Polk county in East Tennessee and hauled by wagons to the nearest railroad station on what is now the Southern Railway. The operations, handicapped as they were, produced fortunes for the originators. This same locality, or approximately so, is now occupied by two immense plants, viz., the Tennessee Copper Co. and the Ducktown Sulphur, Copper & Iron Co., Ltd., both of which are well known to the commercial world. Their combined capital is more than \$5,000,000. With all the modern methods and appliances for mining and reducing this most splendid ore, great results are sure to obtain.

"The wonderful increase in the demand for cement for the construction of concrete buildings, bridge piers and street improvements and innumerable other structures generally induced an examination into the character of material for the manufacture of cement known to exist in this locality, with the result that the valley extending along the Southern Railway and the Tennessee river, 20 to 30 miles east and west of Knoxville, offers the opportunity of unlimited production of high-grade cement equal to any other known, and at an estimated cost that is surprisingly low. Extensive piers carrying the railroad bridge that spans the Tennessee river at

Loudoun, Tenn., and the large wholesale building of Cowan, McClung & Co. of this city, constructed more than 30 years ago with cement made from this material under crude and limited methods, show not the least evidence of deterioration, thus proving its strength and durability beyond any question.

"Previous to the early part of the year 1905 the development of this varied and rich area was served by really only one railroad, viz., the Southern Railway. The completion of the Cincinnati-Knoxville line of the Louisville & Nashville Railroad and the subsequent extensions and divergent branches of the Southern Railway have attracted the interest of other railroad corporations, and it is now reported that the great Pennsylvania system, which controls the Norfolk & Western Railroad and its tributaries, is looking to a participation in the present and future activity of this part of the South.

"The Seaboard Air Line is penetrating the eastern portion of the coal region described by a new line now under construction, extending from the Carolinas across upper East Tennessee to the southwestern part of Virginia, for fuel for its own use and for the magnificent cotton manufacturers that are the pride of the Carolinas and Georgia.

"The Knoxville & Sevierville Railroad Co. has recently been organized. This line is to extend from Sevierville, Tenn., to Knoxville, Tenn., a distance of approximately 40 miles. The county of Sevier has already authorized an issue of bonds to aid in the construction of this line, and when completed will furnish an outlet for the product of thousands and thousands of acres of splendid forest reserves that have never been invaded and the richest iron ore in the South.

"The Holston River Railroad, recently projected and now under construction from Moccasin Gap, Va., to Knoxville, Tenn., passing through the Holston valley and between the Cumberland Valley division of the Louisville & Nashville Railroad and the Knoxville division of the Southern Railway—a section rich in agricultural resources—will provide an outlet for the famous Hawkins county marble and also for the vast deposits of iron ore that have recently been discovered in that locality.

The Bushnell branch of the Southern Railway, now under construction from Knoxville, Tenn., to Bushnell, N. C., and thence to connection with other of its lines south of the Blue Ridge, extending to the Atlantic, is of the greatest importance. This line will provide additional and cheaper transportation for coal for Southern Atlantic coastwise points, for shipping to foreign countries, and to South America particularly, and means a widening of the market for that product. It will also provide additional and cheaper transportation for cotton from the Carolinas to the cotton mills located here. In brief, it means a line of easy grades from the coal fields, through Knoxville, to the sea.

"With the mention of the present transportation lines, and others building, the advantages of the Tennessee river, which drains this great valley, must not be lost sight of. In its present condition, and without the deserving aid of the national government, it is navigable from 60 miles east of Knoxville to its juncture with the Ohio river, thus furnishing an independent outlet to the sea.

"Knoxville, the logical and geographical center for this vast and varied wealth of raw material, is a city of 70,000 inhabitants, and growing at the rate of 5000 to 7000 annually. Her people know no factions or sectional lines. They come from the mountains and valleys of this Commonwealth armed with a hardy physique, native energy and a determination to succeed. They come from the North and from

the East, and together they have linked their destinies. They are proud of their domain and the result of their labor. With their own resources they have erected cotton mills, woolen mills, marble-finishing mills, iron mills and innumerable and important manufacturing plants of other kinds until the city is a veritable beehive of successful manufactories, aggregating in number more than 150 active industries.

"Knoxville enjoys the distinction of being the largest producer of both rough and finished marble in the South; the most extensive woolen mills in the United States are here; the greatest variety of design and the largest production of hardwood mantels is here, while other and different kinds of industries are extending their operations and new ones are being added.

"The geographical position of Knoxville as a distributing point and the progressive spirit of her people has made it a jobbing center of no small proportions, the annual trade in that line amounting to \$45,000,000. Ten healthy banking institutions with a combined capital of over \$2,000,000, local deposits aggregating \$10,000,000 and clearings ranging from \$35,000,000 in the year 1902 to \$70,000,000 in the year 1905 furnish substantial evidence of successful activity.

"The special government census gathered in 1905 relating to industrials shows an increase in the number of manufactories, volume of manufactured products, values of same and wages paid of Knoxville to be greater than any other section or city in this State or of the South.

"Reports of the Southern Railway system, which touches Washington and Norfolk on the east, Charleston, Savannah and Brunswick on the southeast, Chattanooga, Nashville, Birmingham, Memphis and New Orleans on the south and southwest,

Cincinnati, Louisville and St. Louis on the northwest, show its Knoxville division, as to volume and diversity of traffic, car mileage and earnings, to be almost double that of any other of its many divisions. It is said that even the passenger earnings on this division exceed those of the Washington division. The business offered is already too heavy for a single track, and the construction of an additional or double track is now under way between various points, presumably having in view a complete double track over the entire division in the very near future.

"Realizing the importance of this portion of its system and of the need of increased facilities, the Southern Railway has recently appropriated nearly \$2,000,000 for the construction of additional shops and locomotive works at Knoxville that are now under way, and will be the most extensive building and repair shops in the South.

"These indications are further and convincing evidence of unlimited resources and material progress.

"Knoxville and her domain invites more capital, more men of brains and energy. She invites labor—the kind that constructs with the spirit of progress; the kind that owes allegiance to no order of restrictions or socialistic theories; the kind that will join honest effort with opportunities. To such there awaits a welcome and a harvest of prosperity.

"For the employment of both capital and labor she offers the greatest diversity of raw material in unlimited quantities; the choicest food products from her own lands. She offers climatic conditions and geographical position that should induce and maintain the greatest and most successful industrial operations in the world."

ALBERT PHENIS.

HARDWARE MEN IN SESSION.

[Written for the Manufacturers' Record.]

Members of the American Hardware Manufacturers' Association, in tenth semi-annual convention, and of the Southern Hardware Jobbers' Association, in sixteenth annual convention, are mingling in pleasure and business at Hot Springs, Va., this week, their joint or separate meetings beginning on Tuesday and continuing until Friday. The program, aside from the usual routine, includes addresses of welcome by President F. B. Dunlop of the Speer Hardware Co. of Fort Smith, Ark., president of the Southern Hardware Jobbers' Association, and by J. T. McAllister of Hot Springs, Va.; responses by Mr. C. W. Asbury of the Enterprise Manufacturing Co., Philadelphia, Pa., and vice-president of the American Hardware Manufacturers' Association, and S. G. Gilfillan of the Belfont Iron Works Co., Ironton, Ohio, and discussions on increased profits demanded by increased expenses, trade courtesies due a competitor, effects of quantity differentials, uniform freight classification, best methods of posting traveling men, advantages and disadvantages of direct shipments, backbone as an essential element, integrity of contracts and the best business in the world. Those expected to participate in the discussions are Messrs. H. M. Price of H. M. Price & Co., Mobile, Ala.; W. W. Webber of the Webber-Ayers Hardware Co. of Fort Smith, Ark.; W. L. Sanford of the Roberts, Sanford & Taylor Company, Sherman, Texas; F. L. Scott of the Scott Hardware Co., Paducah, Ky.; Alfred Sang of the Garland Nut & Rivet Co., Pittsburgh, Pa.; Charles H. Ireland of the Odell Hardware Co., Greensboro, N. C.; E. M. Bush of Evansville, Ind.; Fred Fox of Fox Bros. Hardware Co., Pine Bluff, Ark.; M. P. Jemison of the Allen & Jemison Company, Tuscaloosa, Ala.; W.

M. Teague, Jr., of Teague & Sons, Montgomery, Ala.; G. H. Lyons of the Rose-Lyons Hardware Co., Little Rock, Ark., and Jas. H. Kennedy of New York city, N. Y.

Each organization arranged also for executive sessions for the disposal of annual reports and for general discussions.

The Southern Hardware Jobbers' Association, with 85 members, represents 13 States, 2 Territories and the District of Columbia, as follows:

Alabama.—Anniston Cordage Co., Anniston; Connecticut.—American Shear & Knife Co., Inc., Hotchkissville; Atlantic Screw Works, Hartford; Wallace & Barnes Company, Bristol; Bridgeport Chain Co., Bridgeport; Becker & Rowland Manufacturing Co., Waterville; Challenge Cutlery Corporation, Bridgeport; Corbin Cabinet Lock Co., New Britain; Corbin Screw Corporation, New Britain; P. & F. Corbin, New Britain; Chapin-Stephens Company, Pine Meadow; Empire Knife Co., West Winfield; Hart & Cooley Company, New Britain; Hopkins & Allen Arms Co., Norwich; Hurwood Manufacturing Co., Bridgeport; Humason & Beckley Manufacturing Co., New Britain; Lockwood Manufacturing Co., South Norwalk; Landers, Frary & Clark, New Britain; Manning, Bowman & Co., Meriden; Meriden Cutlery Co., Meriden; Miller Bros. Cutlery Co., Meriden; Norwalk Lock Co., South Norwalk; North & Judd Manufacturing Co., New Britain; Charles Parker Company, Meriden; Russell-Jennings Manufacturing Co., Deep River; Simeon L. & George H. Rogers Company, Hartford; Stanley Rule & Level Co., New Britain; Stanley Works, New Britain; H. D. Smith & Co., Plantsville; Wm. Schollhorn Company, New Haven; Union Manufacturing Co., New Britain; Williams Bros. Manufacturing Co., Glasdonbury.

Delaware.—E. I. Du Pont Company, Wilmington.

Georgia.—Southern Plow Co., Columbus.

Illinois.—American Steel & Wire Co., Chicago; American Cutlery Co., Chicago; Belding-Hall Manufacturing Co., Chicago; Excelsior Steel Furnace Co., Chicago; Lawson Manufacturing Co., Chicago; National Sewing Machine Co., Belvidere; Republic Iron & Steel Co., Chicago; Reynolds Wire Co., Dixon; Wahab Screen Door Co., Chicago; J. D. Warren Manufacturing Co., Chicago; Whitman & Barnes Manufacturing Co., Chicago; Wilcox Manufacturing Co., Aurora.

Indiana.—E. C. Atkins & Co., Inc., Indianapolis; George H. Bishop & Co., Lawrenceburg; Evansville Tool Works, Evansville; National Sweeper Co., Marion; Ward-Dickey Steel Co., Indiana Harbor.

Maryland.—National Supply Co., Baltimore. Massachusetts.—Ames Shovel & Tool Co., Boston; Bemis & Call Hardware & Tool Co., Springfield; Boston & Lockport Block Co., Boston; Clinton Wire Cloth Co., Clinton; N. R. Davis & Sons, Assonet; Goodell-Pratt Company, Greenfield; Harrington & Richardson Arms Co., Worcester; Iver Johnson's Arms and Cycle Works, Fitchburg; Lamson & Goodnow Manufacturing Co., Shelburne Falls; H. H. Mayhew Company, Shelburne Falls; J. C. Pearson Company, Boston; Simonds Manufacturing Co., Fitchburg;

Indian Territory.—Turner Hardware Co., Muskogee.

Kentucky.—Scott Hardware Co., Paducah. Oklahoma.—Oklahoma City Hardware Co., Oklahoma City.

Louisiana.—Monroe Hardware Co., Monroe; Stauffer, Eshleman & Co., New Orleans; Vordenbaumen & Eastham Company, Shreveport.

Mississippi.—F. McClelland Hardware Co., Jackson; Meyer-Neville Hardware Co., Meridian; Baker & McDowell Hardware Co., Natchez; Louis Hoffman Hardware Co., Vicksburg; Lee Richardson & Co., Vicksburg; Wright Bros., Vicksburg; Crane-Hinman Hardware Co., Yazoo City.

North Carolina.—Charlotte Hardware Co., Charlotte; Weddington Hardware Co., Charlotte; Odell Hardware Co., Greensboro; Heath-Lee Hardware Co., Monroe; N. S. Fulford Hardware Co., Washington.

South Carolina.—Marshall, Wescoat & Co., Charleston; Coleman Wagner Hardware Co., Charleston.

Tennessee.—Mitchell-Powers Hardware Co., Bristol; Virginia-Tennessee Hardware Co., Bristol; Magill Hardware Co., Chattanooga; C. M. McClung & Co., Knoxville; Woodruff Hardware Co., Knoxville; E. C. Atkins & Co., Memphis; Benedict, Warren & Davidson Company, Memphis; Orgill Bros. & Co., Memphis; Thomas, Barnes & Miller, Memphis; Gray-Dudley Hardware Co., Nashville.

Texas.—Ed S. Hughes & Co., Abilene; E. L. Wilson Hardware Co., Beaumont; Maroney Hardware Co., Dallas; Wm. Henry & R. E. Bell Hardware Co., Fort Worth; Bering-Cortez Hardware Co., Houston; F. W. Heitmann Company, Houston; Peden Iron & Steel Co., Houston; H. S. Bettes Hardware Co., Paris; Blakeney-Brooks Hardware Co., Paris; Roberts, Sanford & Taylor Company, Sherman.

Virginia.—Piedmont Hardware Co., Danville; Barker-Jennings Hardware Co., Lynchburg; Paul R. Howard Hardware Co., Norfolk; Watters & Martin, Norfolk; Charles Leonard, Petersburg; Richmond Hardware Co., Richmond; W. S. Donnan Hardware Co., Richmond.

West Virginia.—Bluefield Hardware Co., Bluefield; Kane & Keyser Hardware Co., Belington.

The American Hardware Manufacturers' Association has 224 members in 19 States, as follows:

Alabama.—Anulston Cordage Co., Anniston. Connecticut.—American Shear & Knife Co., Inc., Hotchkissville; Atlantic Screw Works, Hartford; Wallace & Barnes Company, Bristol; Bridgeport Chain Co., Bridgeport; Becker & Rowland Manufacturing Co., Waterville; Challenge Cutlery Corporation, Bridgeport; Corbin Cabinet Lock Co., New Britain; Corbin Screw Corporation, New Britain; P. & F. Corbin, New Britain; Chapin-Stephens Company, Pine Meadow; Empire Knife Co., West Winfield; Hart & Cooley Company, New Britain; Hopkins & Allen Arms Co., Norwich; Hurwood Manufacturing Co., Bridgeport; Humason & Beckley Manufacturing Co., New Britain; Lockwood Manufacturing Co., South Norwalk; Landers, Frary & Clark, New Britain; Manning, Bowman & Co., Meriden; Meriden Cutlery Co., Meriden; Miller Bros. Cutlery Co., Meriden; Norwalk Lock Co., South Norwalk; North & Judd Manufacturing Co., New Britain; Charles Parker Company, Meriden; Russell-Jennings Manufacturing Co., Deep River; Simeon L. & George H. Rogers Company, Hartford; Stanley Rule & Level Co., New Britain; Stanley Works, New Britain; H. D. Smith & Co., Plantsville; Wm. Schollhorn Company, New Haven; Union Manufacturing Co., New Britain; Williams Bros. Manufacturing Co., Glasdonbury.

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ell Manufacturing Co., Erie; James H. Mann, Lewiston; Mann Edge Tool Co., Lewiston; McCaffrey File Co., Philadelphia; McKinney Manufacturing Co., Allegheny; Miller Lock Co., Philadelphia; North Brothers Manufacturing Co., Philadelphia; National Brass and Iron Works, Reading; Oliver Iron & Steel Co., Pittsburgh; Philadelphia Lawn Mower Co., Philadelphia; Pittsburgh Screw & Bolt Co., Pittsburgh; Pittsburgh Steel Co., Pittsburgh; Fayette R. Plumb, Inc., Philadelphia; Reading Hardware Co., Reading; Sharon Steel Hoop Co., Sharon; Sligo Iron & Steel Co., Pittsburgh; Standard Chain Co., Pittsburgh; Standard Horse Nail Co., New Brigh-

ton; C. C. & E. P. Townsend, New Brighton; Warren Axe & Tool Co., Warren; United States Horse Shoe Co., Erie; Wyoming Shovel Works, Wyoming.
Rhode Island.—American Screw Co., Providence; Bullard Automatic Wrench Co., Providence; Nicholson File Co., Providence.
Tennessee.—Irby Bennett, Nashville.
Vermont.—Wallingford Manufacturing Co., Wallingford.
Virginia.—Frictionless Metal Co., Richmond; Richmond Cedar Works, Richmond.
West Virginia.—Kelly Axe Manufacturing Co., Charleston; United States Stamping Co., Moundsville; Warwood Tool Co., Wheeling.

COTTON-OIL-MILL SUPERINTENDENTS.

Interesting Features of the Association's Annual Convention in Texas.

[Special Correspondence Manufacturers' Record.]

Dallas, Texas, June 8.

The thirteenth annual convention of the Oil-Mill Superintendents' Association was held in this city, the sessions commencing on the 6th and closing this evening. There was a large attendance, probably 300. The names of 35 new members were added to the roster. The importance of the gathering of the mill superintendents can scarcely be overestimated. Much good has been accomplished as a result of these conventions in the past, and, basing an opinion upon the merits of the subjects treated and discussed during the convention just closed, the future opens up with promise of still greater things. It is no exaggeration of sentiment to say that a more intelligent body of men who "do things" never previously assembled in the stately city of Dallas. Subjects of a technical and scientific nature were discussed with application worthy of solons, and a study of the convention report, which will give verbatim the details of the proceedings, will prove alike interesting and instructive to not only every oil-mill superintendent in North and South Carolina, Georgia, Alabama, Tennessee, Florida, Mississippi, Texas, Indian Territory, Oklahoma, Missouri, Arkansas and Louisiana, but also everyone in any way connected with seed-crushing interests, directly or indirectly.

Chairman N. T. Blackwell of Dallas called the convention to order. The invocation was delivered by Rev. W. A. Hammatt of the Gaston Avenue Baptist Church, Dallas. Mayor Smith welcomed the delegates to Dallas, in part speaking as follows: "It is my pleasure today, as chief executive of this city, to extend to you, one and all, a cordial welcome to this city. I want you to understand from the start that the keys are yours. I believe I see before me, as the chairman spoke of me, men who do things. I am a great admirer of men who do things. The world admires them most of all."

Thomas Bell of Shreveport, a veteran association member, responded to the mayor's address of welcome in happy form. The speaker then proceeded to review the history of the association from its organization in Dallas in 1891 to the present time, and said he believed much of its success dated from and was attributable to the splendid reception tendered to them in Dallas in its infancy. The convention, he said, has never been more princely entertained in any city than in Dallas.

Mike H. Thomas, president of the Commercial Club, welcomed the visitors. He reviewed the work done by the organization for the State of Texas, and said it ranked with the leading industries. This organization, he said, in a word, produced something from nothing, and for this reason he was glad to lay at their feet the bouquet they so richly deserved. The cotton crop, he said, brought more foreign money into this country than any other export. This organization, he said, was a

leading factor in this industry. He again welcomed them and hoped to see them in Dallas often.

Chairman Blackwell of the reception committee emphasized the welcome extended by the preceding speakers. He assured his visiting fellow-members a welcome second to none. He praised the daily papers of the city. On behalf of the Southwestern Telegraph & Telephone Co. he extended a complimentary use of the lines of the State for family messages.

President H. J. J. Theissen of the association then delivered his annual address, which in part is as follows: "Visitors, members, ladies and gentlemen—We again meet on this, the thirteenth anniversary of the Oil-Mill Superintendents' Association, in this, the metropolis of North Texas, and we are glad that we are the guest of such an enterprising city that has for its motto and aim 150,000; that means that by enterprise and persistence in the future Dallas will be connected with the Gulf by water navigation and will show up fully 150,000 inhabitants, and I voice the sentiment of all when I say that we, the men behind the guns, are happy to be your guests on this occasion and will long remember the kind welcome extended to us, and shall make free use of the latch-string that is hanging outside of your door and the most warm invitation extended to us by your representative bodies, business men and mayor.

"You all know our motto, which is, and always has been, industry, sobriety and economy, and we are proud to state that our members have always lived up to it, which I might state is due very much to the help of our ladies, who have for a number of years given encouragement and added dignity and refinement to our conventions by their presence.

"We are a body of men that is one of the lines in this great cotton-oil industry. Much is expected of us, and a great deal of knowledge is required to fill the responsible position we hold. We must not alone be able to handle men, but a full knowledge of mill architecture, steam and electrical engineering, as well as an intimate knowledge of oil, is required of us. We cannot sit still and leave well enough alone, but must study economics in the manufacture of our products, and that means that it is required of us to keep our inventive genius always at work.

"Our annual meetings mean a great deal for us. They are a means for exchanging ideas and finding out what others are doing and in taking active part in the deliberations, thereby not alone benefiting the individual, but all.

"Nobody can attend our yearly conventions without benefit to himself and the mill he is engaged with. Now, brethren, this is your convention, and does not belong to the officers you have chosen. Every one of you is expected to take an active part in all of our craft. Let our aim be to make out a mere handful in a few years

to a respectable proportion, which shows that we must do some good for the cause it was started for, namely, elevation of our craft. Let our aim be to make our conventions every year more and more useful to all. Profits are getting smaller every year, and only by industry, sobriety and economy can we accomplish the task that is set before us—that is, to produce the very best results with the machinery under our charge, and manufacturing our products with the least expense, so that when the season's run is over we can be greeted by the owners of the mill with 'well done, thou good and faithful servant.'

"I am glad to note that in my travels among the mills a good many of our members are studying mechanical, steam and electrical engineering, and they will be more useful members and will in the course of time reach the top round in the ladder of success. We are living in a progressive age, and it behooves us all to be progressive. It will not do to sit still on old laurels. If you do, you will be counted out.

"We should have a good paper, and it should be issued regularly. We have had almost no paper at all, and as to regular time of issue, you all know what it has been.

"As to the proceedings of our meetings, I would recommend that same be given to some printing establishment that can and will issue same a short time after our convention is over, so that we will not have to wait such a long time before we receive it, and I hope that you will so instruct our secretary.

"I would like to ask who the members were that voluntarily offered to write for our paper and also who got up and offered to write papers to be read at this meeting. I have not been advised that any have been offered. I would also like to draw your attention to the fact that I have been your presiding officer for several years, and I know that we have quite a number among us that are better fitted to occupy this chair than the present occupant, and would earnestly recommend to choose one better fitted to fill this responsible position. Ever since I joined this association I have been an active member, and have done my part of the work willingly, and beg to be put on the retired list. Let some of the other brethren put on the harness and infuse some new energy, vim and push in our organization. This is a new year we are just starting in on; let all of us put our shoulders to the wheel and give a mighty push to the Oil-Mill Superintendents' Association, and let us roll before the oil-mill world our ark, 'industry, sobriety and economy.'

"A fine program has been prepared for this meeting, and if your officers have made mistakes, they, one and all, have done the best they could, and I trust you will overlook any shortcomings. In conclusion, I will say that I hope all will return home satisfied with the results of this meeting and carry away a kind regard and many benefits, willing to help and helping to make the next meeting even better than this one. Gentlemen, I thank you."

Thomas Bell of Shreveport, La., spoke of the extraction of oil from cottonseed by the cold process. He said: "With the new system we take the seed direct from the linters to the press, working the entire product with the one machine, thereby saving without a doubt any loss that might go to hullhouse with the hulls. This new invention extracts the oil from the cold seed by screw pressure. All mechanics know the power that can be produced by the action of the screw. The pitch of the screw can be changed or cut to suit the conditions, and almost any amount of pressure can be produced. With this system we produce a pressure far exceeding

any ever produced by hydraulic pressure.

"Analysis of our product by cold pressure reveals the fact that we get a better extraction than we do from cooked meal. The oil refines with less loss in refining than oil manufactured by the cooling system. The cake from the cold-pressure method shows itself to be superior as bovine food.

"The labor under this new system, as far as the pressroom is concerned, is fully three-fourths less."

T. W. Wolf of Oklahoma City read a paper on "The General Maintenance of the Mill." Concerning the care of the mill at the close of the season, he said: "Take the lintroom. The linters should be taken down and cleaned, all the boxes wiped out, the brushes removed or the lids removed from the brushes, so that light can get in. In this way the rats will not molest the brush. The belts in this department should be taken off and cleaned thoroughly, rolled up tight and put in a box or close room, so the wind will not dry them out and make them crack when put in use next season. The hulling machinery should have all the knives, both cylinder and concave, removed, and all dirt should be cleaned off. The screens where the meats are separated should be cleaned by means of a wire brush, and all the meats that should be stuck ought to be removed. Each roll should have a coat of cylinder oil to prevent it from rusting during the time it is idle."

Mr. Wolf advised that in the pressroom all attachments should be well cleaned, and to the engine and boiler rooms he advised the removing of the valves from the engine and the packing away of the valves, well oiled, until next season. The removing of the scale from the boilers was recommended. The feed-water heater should be cleaned once a week during operation, Mr. Wolf concluded.

"Sobriety and Economy" was discussed by S. J. Duke of Pittsburg. He said: "There is little safety without sobriety. There are very few men that can drink and still be safe for the position of oil-mill superintendent. There is one more man who is not a safe man, and that is the one who will sit in his office and let his men run the mill. The day of wasteful extravagance in the oil-mill business is over. We should practice economy at all times. The superintendent should stay in his mill, and not in his office. It is safe to say that the man who does not stay with his labor is not giving his mill what it is entitled to."

"The superintendent should see that his machinery is safe before he goes home for the night; see that the boilers are in a safe condition before turning the plant over to the night man, and give him to understand that you want it in the same condition in the morning; have him understand that he is responsible to you for the safety of the business."

"It is not safe for your own interest to leave your work until it is done. The mill superintendent should be a man of courage and have a will of his own, and if he is not he can't make a success of his work."

S. N. Dickey of Dallas discussed "The Abuse of Valves," giving a number of reasons why valves leak after being placed in a pipe line. He declared that when valves are claimed by purchasers to be defective, in 95 cases out of 100 the valves are found to leak because of carelessness on the part of those who installed them.

D. F. Williamson of New Braunfels explained in a paper what he considered the most satisfactory results of the huller, and he explained at length how to obtain the best results.

He said: "The huller should set on a good solid foundation of concrete if on the ground floor, or on good studding if up-

stairs. Another very particular thing is the sharpening of the huller knives. They should be ground perfectly straight and square. A huller with knives ground right and set right will work from 80 to 100 tons of seed from 12 to 18 days, provided the seed is clean. Don't ever run gritty seed through the huller.

"The belts that drive the huller should be as near the same length as possible. Do not have one belt slack and the other tight, for the tight belt will have the load and will have a tendency to pull the whole huller in a twist."

"The Management of Labor in the Oil Mill" was the title of a paper by G. A. Baumgarten of Schulenburg, Texas. The paper dealt exhaustively with the subject.

"I have been working nearly exclusively white labor for the past 24 years. Fifty per cent. of my men have been with me from 3 to 24 years; hence you will see that I have less than half my men to train each year. The new men I divide equally on each crew, that neither crew will have the advantage over the other. I consult the older men after having made up my day and night crews to see if they are satisfied, and should there be any changes wanted this is then mutually agreed upon.

"The first week I run with one crew, in order to train my men and see that everything is in good running order. Every man has to take care of his department. If anything goes wrong at the mill it is then possible to know who to blame. If it were negligence that caused damage I take the erring one aside and reason with him, but not in the hearing of the other men. This is always appreciated by the majority of men. If you reproach him in the presence of other men he will naturally feel hurt about it.

"In employing men advanced in years I never change them from the position I trained them in, but the younger men I change about in order that they may learn to fill any position in the mill. This always comes in handy in case of sickness. With the younger men I devote most of my spare time, in order that they may work themselves up. I also give them mechanical journals to read and everything else that may be of benefit to a young man to advance himself in better-paying positions.

"The South is just in its infancy in building factories of all kinds, and many poor young men, by getting a good start in an oil mill and afterwards taking a course in a technical or correspondence school, will be prepared to take good-paying positions."

The subject of the paper read by N. T. Blackwell of Dallas was "The Elements of Success." He said in part:

"My subject is synonymous with the cardinal principles of your organization. I am much gratified at the evidence of improvement manifest in the intellectual and mechanical features of the papers and discussions. It leads me to believe that you have been both diligent and studious in your work, and when you pursue your occupations strenuously gratifying results will always follow.

"The cotton-oil industry in its various ramifications is a wide one, and very inviting to the mechanical engineer and to the scientific student of oils and the various products therefrom. You gentlemen have played a very important part in the development of this industry up to the present time, and it is expected of you, in this age of research and discovery, to make still further progress. The elements of success lie in a firm adherence to and diligent application of industry, sobriety and economy to every problem of life that confronts you."

The paper of H. C. Beasley of Grenada, Miss., dealt with the handling of stock

from separators to press. Excerpts from the paper read:

"Care must be taken to see that the stock is evenly distributed the entire length of the rolls, and not allowed to run through a space of 10 or 12 inches in the center. When the seed is properly distributed the little oil cells in seed are better crushed and the rolls themselves wear alike across their entire length.

"To get the best work out of the rolls it is absolutely necessary that they be kept in perfect line and level, so that the friction rolls will turn freely.

"After leaving rolls stock should be carried directly to the kettles, and in them prepared for the presses. In this process of cooking there is probably more difference of opinion among mill men than any other part of the manufacturing process. We don't think there can be any set time or amount of steam pressure used in cooking, because there is a marked difference in the way kettles of different sizes cook. The smaller kettles, as a rule, require more steam pressure than the larger ones. Our mill is equipped with 72-inch kettles, and we cook on 40 to 60 pounds of steam, while we know of other mills of smaller kettles using 60 to 80 pounds of steam. We all get practically the same results.

"After the meal is properly cooked it should be put in the presses with as little delay as possible. We claim that just one minute or two will make a difference in the oil yield. We know a mill in the same territory that we are and one that handles the same class of seeds, the chemical analysis of whose products shows about the same amount of oil left in cake that ours show, yet the difference in oil yields is very marked.

"Meal should never be left in subheater where a sub is used, but it should go to the former as hot as it left the kettles. If meal accumulates in the sub from any cause one extra press should be run up, so that when it leaves the kettle in proper condition it will not be damaged by a stay in the subheater."

A committee was appointed to wait upon John Bannon to confer with him in regard to a plan he proposed for the distillation of alcohol from cottonseed hulls, potatoes and grain, as well as to learn his views with regard to editing the superintendents' monthly magazine.

Mr. Bannon delivered an address, largely technical in its character, and relating to the practicability of the mills during the idle season, or permanently, distilling alcohol from grain, potatoes, cottonseed hulls or artichokes for light, power and heat purposes. It has been found that artichokes yield a higher percentage of alcohol than any other form of vegetation.

The favorable attention which the United States government has assumed with regard to removing duties from alcohol, de-naturing the product and using for the purposes named would appear to open up new possibilities for oil mills in States and locations where such vegetation is or can be produced in abundance. Mr. Bannon recounted his experience in the oil-mill industry, and further said he was conducting a series of experiments and investigations on some of the problems confronting the trade, the results of which would be furnished the association. The problem of utilizing the long shut-down season to advantage would be considered, whether with regard to the introduction of ice-making, the production of light and power by electricity and alcohol, soap and fertilizer manufacture, each phase of these important subjects would be discussed from a technical and therefore practical standpoint, the series of articles appearing duly in MANUFACTURERS' RECORD.

The proceedings of the last day opened up with the election of John Bannon by

the committee appointed for the purpose to edit and manage the issuance of *The Oil Mill Gazetteer*, the official organ of the association. On vote he was unanimously elected to have sole control of the paper.

A paper written by Dr. A. D. Thomas of Little Rock, Ark., discussed exhaustively "The Evolution of the Ginning and Baling of Cotton." The paper was as follows:

"When in 1793 Eli Whitney first invented the cotton gin he had three elements, the saw, the ribs and the brush, with the saw and brush driven by the same belt. This to many of you may be news, for it is claimed to be of modern invention. For over 100 years we have for both gins and linters simply improved on these elements, adding feeders and condensers and different elevator systems, until today there are at least seven factories where you can buy a four-gin system that will turn out from 30 to 40 bales of cotton in daylight. The only innovation in this system is what is called the air-blast gin, which dispenses with the brush and is applicable to both gin and linter. The system eliminates the rapid running brush, the speed of which sets the limit of the speed of the gin. I will not pass over the cotton gin proper without mentioning what has come under my observation for two years—the improved roller gin; that is, a gin differing from the well-known McCarthy gin, universally used in India, Egypt and the Sea Island district of America. This gin gins every seed at one lick, so that the cotton looks different from saw-gin cotton.

"As to baling, the first cotton prepared for shipping was in long sacks. The manner used was to swing a long sack from a hole in the floor, dump in the cotton and tramp on it, say 100 to 150 pounds in a sack. Then came the old wooden-screw compass press, primitive, but powerful. I helped build and use one in 1866 and 1867, and the latter year we tied cotton bales with ropes. Next came the iron-screw compass press, taking less room, but built on the same general lines. Then the Wilson arrow press, and a long array of iron-screw and hydraulic-ram presses, all dependent upon tramping the cotton in, until 1865 came the direct steam, single-box press." The paper dealt further of improvements in cotton machinery, speaking at length of the roundlap bale.

"The Industrial Age and Its Achievements" was the subject of a paper by Raymond Winfree of Schulenburg, who said: "Within the last decade we have seen a dozen inventions and discoveries, any one of which would be sufficient to illuminate a whole century of the Middle Ages. From the days of the stone hatchet and bronze tools we have come to a day when the race is housed and fed and clothed and enlightened as never before, with improvements still a constant tendency. A palace in medieval times did not give the genuine comforts of a mechanic's home of today.

"The capacity to produce is increasing. If we take the half-century from 1850 to 1900, the population has increased about two and one-quarter fold. Meanwhile, wage-earners have increased about five and one-half fold, wages about ten fold, capital about nineteen fold and the value of product about thirteen fold.

"It is the conclusion of the chief statistician for the manufacturers that the apparent value of products per wage-earner has increased from \$1965 to \$2451."

The paper dealt further with the different stages of civilization.

"Why All Superintendents Should Attend the Meetings of the Association" was the topic treated in a paper by M. W. Faherty of Memphis, Tenn. Mr. Faherty said in part:

"From the earliest records of man's do-

ings we find mention of conventions for various ultimate purposes, but always the immediate intention has been to discuss with each other various ideas as to the means best suited to accomplish the desired end. Hence in our annual meeting and discussion of subjects pertinent to our profession we have simply adopted the method proven to be the most practical.

"Each year some superintendent gives tangible evidence of greater mechanical efficiency, while others seem to be content to do as well as they did the preceding year. Notwithstanding the certainty of material reward for individual improvement held out by most millowners, there is always a considerable number who cannot be aroused to greater efforts. To such we offer cordial invitation and trust that a few days' sojourn with our regulars will prove their salvation by arousing their ambition.

"Many a good man is deterred from attending because the one in control of the purse-strings thinks that the mill would be loser to the extent of his expenses incident to attending the convention. They cannot be made to see that a small outlay of money for such purposes will be doubly returned to them through better results obtained the ensuing season.

"The majority of us are isolated from our fellow-superintendents the greater part of the year, and we should gladly avail ourselves of meeting coworkers from other sections of the oil-mill territory."

The closing session marked the election of new officers as follows: M. W. Faherty of Memphis, Tenn., president; C. N. Thatcher of Wills Point, vice-president for Texas; M. B. Wilson, Lockhart, Texas, secretary; W. H. Kinnimonth of Brownsville, Tenn., vice-president for Tennessee; T. J. McNulty of Brookhaven, Miss., vice-president for Mississippi; A. A. Diffey of Fort Smith, Ark., vice-president for Arkansas; T. G. Wolfe of Oklahoma City, vice-president for Oklahoma and Indian Territories.

In the selection of a place for next year's meeting Memphis received the majority of votes, and that city was therefore selected.

Finance—W. M. Cassel, Whitesboro; S. J. Duke, Pittsburg; William Kinnimonth, Brownsville.

Resolutions—M. W. Faherty, Memphis, Tenn.; J. G. McRay, Gonzales; George T. Parkhouse, Sweetwater.

Special Resolutions—George T. Parkhouse, Sweetwater; Edwin L. Johnson, Texas; C. B. P. Carver, Arkansas.

JOHN BANNON.

The New Earth. A Recital of the Triumphs of Modern Agriculture in America. By W. S. Harwood. Publishers, the Macmillan Company, New York. Price \$1.75.

This work is in essence an exposition of the wide-reaching benefits flowing from the application to agriculture of the common sense of science. In demonstrating what is being accomplished by specially-trained men in soil renovation, breeding new grains, developing plants, combating insect enemies and weeds, handling forests, operating dairies, reclaiming lands, etc., the work emphasizes the fact that the truly successful farmer of the future must be as fully equipped for his task as is the lawyer, the editor, the doctor or the manufacturer in their respective fields. Such equipment looks to the making most of the material at hand, the saving of energy and economy in handling the products, the compelling of earth to yield its greatest tribute without being exhausted. To such an end science of the most ideal kind has already contributed directly and indirectly, though in pursuit of something entirely different. But in the last quarter of a century there has been much scientific

work done with a strictly economic purpose in the various bureaus of the Department of Agriculture at Washington, and more notably, perhaps, in the State experiment stations, most of which co-operate more or less with the department experts. Even here, in spite of utilitarian results, the fine spirit of devotion to science as science prevails. It is from the literature of such workers and investigators that the author of "The New Earth" has received much inspiration for an entertaining volume.

The Iron and Metal Trades.

The *Iron Age* in its weekly review says: "May, being a month of 31 days, showed a production of 2,098,746 tons of coke and anthracite pig-iron, as compared with 2,073,222 tons in April, a month of 30 days, which proves that the stacks have not been doing as well lately, with the approach of summer. With the same number of furnaces blowing, the capacity at work declined from 484,031 tons per week on May 1 to 472,997 tons on June 1. The production of the plants owned by the steel companies was 1,372,423 tons in May, as compared with 1,333,591 tons in April.

"So far as stocks are concerned, it may be stated, with the reserve which the absence of official statistics from the East and the Central West imposes, that accumulations are very light. It is known that the Steel Corporation has been running along for months with a stock, including all kinds of iron, which has fluctuated between 130,000 and 140,000 tons. The whole South had a trifle over 100,000 tons on June 1. Consumption, therefore, is keeping wonderfully close to an enormous production. Buying from the merchant furnaces outside of steel-making irons and pipe irons has now been light for months, and a sharp buying movement may set in as soon as the crop situation is clear. It is not believed that melters will anticipate crop results.

"Some wild reports of large sales of Bessemer pig for forward delivery have come from Pittsburgh, which prove to be incorrect, so far at least as the United States Steel Corporation is concerned. That interest has not purchased more than trifling quantities for the third quarter. What has been done is that the Republic Company has bought 17,500 tons additional for the third quarter, and the Sharon Steel Hoop Co. 5000 tons from the Bessemer Association, which, by the way, does not now include as many furnaces as it did six months since. The report that the Cambria Company has taken 90,000 tons for the second half cannot be verified. In Chicago the Illinois Steel Co. has bought 5000 tons of Bessemer from a merchant furnace in the district, which takes the plant out of the general market to that extent. In the East only small lots of steel-making irons have changed hands. Generally speaking, the situation is strong in this branch of the industry."

HOUSTON TO GALVESTON.

Stone & Webster of Boston Expected to Build Electric Railway.

It appears to be definitely decided that the proposed electric railway from Houston to Galveston, Texas, 51 miles, will be built by Stone & Webster of Boston, Mass., who are largely interested in electric railways in various parts of the country. A report from Houston quotes G. E. Tripp, a representative of that firm, as saying that negotiations have been closed with E. M. House and R. H. Baker of Austin and others, and survey is to begin immediately, construction having been determined upon.

During May 7036 tons of Peace River phosphate rock were shipped through Punta Gorda, Fla., a total since the beginning of the year of 31,061 tons.

The Trinity Valley & Northern Rail-

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

NEW RAILROADS PLANNED.

Several Mineral Lines to Be Built—An Electric Scheme in Louisiana.

The Wayne Railroad Co. of Wayne county, Tennessee, has been incorporated by T. H. Allen, D. H. Bacon, J. W. Stults, J. E. Cole and J. H. Craig to build a line from the Alabama boundary to Mannie, Tenn. The line will follow the roadbed of the late Florence & Wayne Railway Co., and it will doubtless be a continuation of the Mineral Belt Railway Co., which has just been incorporated in Alabama, where Mr. Allen resides at Florence. This will make a road about 50 miles long from Florence northward via Moon Postoffice to Mannie, where it will connect with the Nashville, Chattanooga & St. Louis Railway. The incorporators of the Mineral Belt Railway are Alexander H. Sherrerd of Scranton, Pa., president; Truston H. Allen of Florence, Ala., vice-president; James E. Burr of Scranton, Pa., secretary and treasurer; M. E. McDonald of Scranton and L. A. May of New York. Mr. W. J. Murray of Scranton is also named as a director. Mr. McDonald is reported to have bought a large tract of mineral land in Tennessee. A survey is reported to be under way.

The New Orleans & Baton Rouge Railroad Co., capital \$2,500,000, is chartered in Louisiana to build a line about 80 miles long from New Orleans to Baton Rouge, and which will probably be operated by electricity. The incorporators are W. O. Orton, C. S. Young, Edward Godchaux, Rene H. Himel, Walter Godchaux and Ferdinand E. Larue. The Messrs. Godchaux are members of the Leon Godchaux Company, of which Mr. Larue is an employee. Mr. Orton is engineer in charge. The survey is said to have been made, and the line will follow the east bank of the Mississippi river. Edward Godchaux is president and Walter Godchaux is vice-president.

The Chattanooga Northern Railway Co. has applied for a charter in Tennessee to build a line about 20 miles long from Chattanooga to Walden's Ridge for the purpose of developing mineral lands. The Chattanooga Company, Ltd., is interested. The incorporators are W. G. M. Thomas, Thomas MacClellan, J. H. Thomas, Robert J. MacClellan and L. M. Thomas. Mr. W. G. M. Thomas is general manager of the Chattanooga Company, of which Mr. Thos. MacClellan is secretary. This company owns over 40,000 acres of iron and coal lands. Thomas Crewdson of London, England, is the principle stockholder.

The Roanoke & Salem Traction Co. has been chartered to build a line from Roanoke to Salem, Va., about five miles; capital \$25,000. The officers are: President, O. L. Stearnes; vice-president, Chas. D. Denit; treasurer, W. B. Dillard; secretary, W. H. Tinsley; general manager, R. W. Kime. These, with Capt. J. H. Wright of Roanoke and Mr. J. V. N. Moore of Machaponga, Va., constitute the board of directors.

The Gassaway, Elk River & Huttonsville Railroad Co. has filed its charter in West Virginia; headquarters at Clarksburg. The proposed line is from Gassaway along Elk river to Webster Springs, thence along the Elk river and the Tygart Valley river to Huttonsville, W. Va., about 50 miles. The capital stock is \$5500. The incorporators are T. M. Jackson, Clarksburg; E. B. Carlton, Sutton; J. M. Hoover, Webster Springs; Elihu Hutton, Huttonsville, and L. H. Kelley, Sutton, W. Va.

The Trinity Valley & Northern Rail-

way Co. has been incorporated in Texas to build a line from Dayton to Cleveland, Texas, about 25 miles, which will connect the Texas & New Orleans Railway with the Houston, East & West Texas Railway; capital \$25,000. The incorporators are L. Fouts of Dayton, R. S. Sterling, W. B. Cottingham, Charles B. Wood and Champ Ross of Houston, J. C. Johnson of Richmond, A. L. Rutt and J. B. Sterling of Dayton, C. L. Rutt of Beaumont, W. H. McGregor of Carson, Texas.

Among other proposed railroad enterprises are these:

The Pueblo, Oklahoma & New Orleans Railroad, chartered in Oklahoma with \$3,500,000 capital to build a line from Pueblo, Col., to New Orleans, La., 1050 miles; estimated cost \$21,000,000; headquarters at Oklahoma City. The incorporators are R. A. Woolridge, W. C. Burke, George H. Dodson, Warren K. Snyder and John E. Carson, all of Oklahoma City, O. T.

The Marianna, Brinkley & Western Railroad Co., incorporated in Arkansas to build a line from Marianna to Brinkley, Ark., 30 miles; capital \$210,000. The incorporators are Julius Lesser, Morris Lesser, W. P. Weld, S. D. Johnson, James B. Grove, W. T. McClintock and J. R. Jarrett.

The Marion Railroad Co., chartered at Fairmont, W. Va., to build a line from Fairmont, in Marion county, via Fairview to Blockville, in Monongalia county, which adjoins Marion county; capital \$500,000. The incorporators are J. Y. Hamilton, J. R. Thomas, Jr., J. B. Gregory and J. W. P. Jarvis of Fairview, Thomas W. Fleming, James R. Linn, Frank H. Bailey and Allison S. Fleming of Fairmont, W. Va.

The proposed Tampa & Sulphur Springs Electric Railway Co., which is to build a line from Tampa, Fla., to Sulphur Springs, about six miles, has organized by electing the following directors: T. H. Synon of Norfolk, Va., president; H. H. Kirkpatrick of Johnson City, Tenn., vice-president; Eugene Haltsinger, secretary and treasurer; D. E. Frost and Louis Brill.

The Valdosta, Moultrie & Northwestern Railroad Co. has applied for a charter in Georgia to build a line from Valdosta to Moultrie, about 40 miles. The incorporators are C. R. Ashley, E. P. Rose, R. F. Ousley, J. Y. Blitch, J. A. Dasher, H. C. Briggs and D. C. Ashley.

A Long Lumber Line.

A report from Beaumont, Texas, says that the Galveston, Beaumont & Northeastern Railway Co. has arranged to begin construction. The line will connect with the Peach River & Gulf Railway, which has the same principal officers, Messrs. C. S. Vidor, president, and A. W. Miller, vice-president and treasurer, both of Galveston. They are interested in the Beaumont Saw-Mill Co., as well as in the Miller & Vidor Lumber Co., which has a large amount of timber land. The two lines when completed will give these lumbermen 188 miles of railroad, which will perform services as a common carrier as well as for the lumber mills.

The Peach River & Gulf Railway is at present only 11 miles long from Midline to Timber, Texas, and is to be extended from both ends, namely, 65 miles from Midline to Beaumont and 12 miles from Timber to a connection with the International & Great Northern Railroad between Conroe and Willis. The Galveston, Beaumont & Northeastern Railroad is, as heretofore stated, to build 100 miles from Beaumont to the Sabine river in Newton county, Texas.

Rock Hill to Spencer.

Mr. J. G. Anderson, president of the Rock Hill Buggy Co., Rock Hill, S. C., writes the MANUFACTURERS' RECORD that

plans for the proposed railroad from Rock Hill to Spencer have not yet taken definite shape, but the line will undoubtedly be constructed. At a meeting of citizens the project was discussed and \$65,000 were subscribed towards building the road, which will require about that much more. It is expected that other business men and manufacturers will furnish the needed funds. Committees have been appointed to get right of way and subscriptions, after which the company will doubtless be organized as the Rock Hill Railroad Co.

Spencer is a little station on the Seaboard Air Line about eight or nine miles from Rock Hill. A road from this point to Great Falls, where the Southern Power Co. is now putting in a power plant, has already been constructed, and it is the hope of the projectors that this road will be continued to Camden, where it will touch the Atlantic Coast Line. The building of the road from Rock Hill to Spencer will therefore connect Rock Hill with the Southern Railway, the Seaboard Air Line and the Atlantic Coast Line.

Among others interested in the proposed line are W. L. Roddy, C. W. Spencer, Ira B. Dunlap, T. L. Johnston, J. M. Cherry, W. J. Roddy, W. S. Lee, Jr., R. T. Fewell, J. R. Barron and J. B. Johnson.

Atlanta, Griffin & Macon.

The Atlanta, Griffin & Macon Electric Railway, according to a report from Atlanta, Ga., is to be built as soon as possible, the preliminary work having been put in the hands of the following executive committee: W. J. Kincaid, Griffin; W. Jordan Massee, Macon; Clifford L. Anderson, Edwin P. Ansley and W. A. Wimbish, Atlanta.

The engineering department of the N. P. Pratt Laboratory has been employed to make the location survey, to secure rights of way and to make estimates of the cost of construction. The distance from Atlanta to Griffin and Macon is about 90 miles, and it is proposed to build a loop at each terminal. The incorporators include, besides the members of the executive committee, the following: Seaton Grantland, J. M. Brawner and N. B. Drewry of Griffin, J. T. Moore and Minter Wimberly of Macon and N. P. Pratt of Atlanta.

Ashland Interurban.

Mr. V. V. Adkins, secretary of the Commercial Club, Ashland, Ky., in a letter to the MANUFACTURERS' RECORD notes the organization of the Ashland Interurban Railway Co. It has secured franchises in the city of Ashland and also in Boyd county, Kentucky. The map shows a loop running through the principal business streets of Ashland and also through Pollard and Oakview, in the suburbs, making a loop of about six and one-half miles, and also extending from Ashland to Russell, Ky., opposite Ironton, Ohio, five miles, this latter extension covering the approaches of the new Ashland and Ironton bridge across the Ohio river. The company also contemplates extending from Russell to Greenup, Ky., nine miles.

Besides holding a franchise for the interurban road the company also has a franchise for electric lighting, which it expects to use in connection with the line, although there has been some talk of operating gasoline motor cars.

Thomas Boggess, Jr., is secretary at Ashland, Ky.

Texas Railway Contract Let.

The Texas Railway Co., San Antonio, Texas, informs the MANUFACTURERS' RECORD that the construction contract has been let to the Rock Island Construction Co. of Chicago, Ill. The line will run from Port O'Connor to Yoakum, San Antonio,

Victoria, Lagrange, Seguin and other points in Texas, a total distance of about 250 miles. About 90 miles are to be built immediately. Connection is to be made near Victoria with the St. Louis, Brownsville & Mexico Railway, at Victoria with the Southern Pacific Railway, at Yoakum with the San Antonio & Aransas Pass Railroad, and at Lagrange with the Missouri, Kansas & Texas Railway. The territory is farming country, and will be colonized by the efforts of the railroad company and by land companies connected with the railroad.

The engineer in charge is L. A. Gueringer, with headquarters at Victoria, Texas. The contractor is to furnish construction equipment, and the regular equipment for the road will not be purchased for some time yet.

Burlington Improvements.

An officer of the Chicago, Burlington & Quincy Railway Co. writes from St. Louis to the MANUFACTURERS' RECORD that the proposed double-tracking between Kansas City and St. Joseph, Mo., is under consideration, but it is not definitely decided at present. Grading for the proposed Waldron and Beverly cut-off is completed, track is being laid and bridges built, with the expectation of putting the line in service in the fall. This is a realignment of 11 miles' length, saving 1.3 miles as compared with the old line.

A press report says that the road is already double-tracked between St. Joseph and Bushville; also that extensive terminals with 38 miles of track and a large elevator are to be constructed at Kansas City. Several bridges of importance are being constructed, and it is said that the improvements in Missouri will cost the company about \$1,500,000.

Appointments.

The Southern Railway Co. announces that Mr. Fred. H. Behring is appointed assistant general freight agent of the Louisville division, with headquarters at Louisville, Ky., vice Mr. R. J. Curran, resigned to accept service with another company; also that Mr. T. C. Coffin is appointed traveling freight agent at Asheville, N. C., vice Mr. H. A. Hudson, Jr., resigned.

The following appointments are also announced by the Southern Railway: Mr. C. C. Woodwerth, soliciting agent, Nashville, Tenn., vice Mr. C. H. Sanders, transferred; Mr. C. S. Bourque, traveling freight agent, Cairo, Ill., vice Mr. J. A. Dowling, resigned to accept service with another company; Mr. J. W. Thomas, soliciting agent, Chicago, Ill., vice Mr. C. S. Bourque, transferred.

Expecting a Trunk Line.

A report from Portsmouth, Va., says that it is believed among railroad men that important developments will result from the recent Norfolk & Southern deal, which includes the Atlantic & North Carolina Railroad, and the recent combination of Georgia railroads, in which latter the Williams and Middendorf interests are concerned. Mr. R. Lancaster Williams is named as being prominent in the Atlantic Coast Terminal Co., which has purchased valuable water-front property at Portsmouth, and it is anticipated that there will eventually be made a through line from that city via the Norfolk & Southern, of which Marsden J. Perry of Providence, R. I., is president, and projected extensions that will finally reach Augusta, Ga., and thence to Valdosta and the Gulf of Mexico.

Alcolu Railroad Extension.

Mr. D. W. Alderman, vice-president of the Alcolu Railroad Co., Alcolu, S. C.,

writes the MANUFACTURERS' RECORD that the line will be extended from Beulah to Motts Crossroads, on or near Lynch's river, a distance of about five miles. Most of the grading has been done, and all of the material is on hand except the ties, and negotiations are under way for building the track. The contract will probably be closed soon.

The road will run through a fertile agricultural country thickly settled. Cotton is the principal product, and a large modern ginnery has already been erected at Motts Crossroads, and when the line is completed there a great deal of business will be received by it.

Texas & Pacific Improvements.

J. B. Paul, general superintendent of the Texas & Pacific Railway, is reported as saying that it is hoped to complete the rebuilding of the main line from New Orleans to Marshall, Texas, in 1908. The work has been under way for about three years. Millions are being spent in Louisiana, and the entire line is to be laid with 75-pound rail and gravel ballast. Grades are being reduced and bridges eliminated wherever possible. The line is to be double-tracked from New Orleans to Baton Rouge Junction, where the traffic is heaviest. There are 350 miles of main-line track in Louisiana, and besides 300 miles of branches. Some of the branch lines will also be improved.

May Adopt Electricity.

The Maryland & Pennsylvania Railroad Co. is considering plans to adopt electricity for operating. The road is 79 miles long, and runs from Baltimore to Bel Air, Md., and Delta, Pa., and thence, reversing the general direction of its line, to York, Pa. The road is now operated by steam locomotives, and is doing a good business. It is also said that the company will build a connection in Baltimore to the Baltimore & Ohio Railroad. The Maryland & Pennsylvania Terminal Co. was formed recently to provide better terminal facilities for it.

Miona Springs Railway.

Mr. C. L. Shepard writes from Fort Valley, Ga., to the MANUFACTURERS' RECORD concerning the proposed Miona Springs Railway, for which a charter application has been made. The road is to be about 26 miles long, and will open up a valuable agricultural territory, besides making accessible Miona Springs, famous for their mineral water, in Macon county. It is the purpose of the organizers to begin construction on or about July 1 and to push the work to completion.

Railroad Notes.

The Baltimore & Ohio Railroad Co. has, it is reported, ordered 4000 tons additional of steel rails to be delivered this year.

The Florida East Coast Railway is laying 90-pound rails between St. Augustine and Jacksonville. The old rails were 70 pounds. An increase in weight of rails is also to be made on other parts of the road.

Mr. A. A. Allen, vice-president and general manager of the Missouri, Kansas & Texas Railway, is quoted as denying the recent press report that his company and the Burlington system had purchased the Guthrie, Fairview & Western Railway.

Mr. W. F. Owen of New Orleans, president of the New Orleans, Crowley & Western Railway Co., is reported as saying that the location survey is completed and construction of the line will soon begin. It will connect New Orleans with the Jennings oil fields, and will be about 163 miles long. The capital is \$1,000,000. There are to be numerous branches, but their location is not yet decided.

MINING

ELKHORN COAL FIELDS.

Big Developments Following Railroad Extension.

[Special Cor. Manufacturers' Record.]

Boston, Mass., June 8.

The Big Sandy Company of this city, which owns, as has been previously stated in the MANUFACTURERS' RECORD, 130,000 acres of the heart of the Elkhorn coking-coal field of Pike county, Kentucky, has recently made a number of leases for large coal operations on its property. It was to reach this property and adjacent coal lands that the Chesapeake & Ohio built its Big Sandy line, and since the opening up of that road and the construction of a branch line up Marrowbone creek the Big Sandy Company has made leases which will give an aggregate output of about 6000 tons a day, with even more leases now pending. Mr. Charles E. Hellier, the president of the Big Sandy Company, furnishes for the MANUFACTURERS' RECORD the following information as to the mines which are now being opened up:

"Greenough Coal & Coke Co., capital \$100,000; Mr. Neil Brennan of Shamokin, Pa., president; Mr. George J. Bedow of Pikeville, Ky., superintendent. This company has two mines, one on the upper Elkhorn and one on the lower Elkhorn seam, with a daily capacity of 1500 tons.

"The Pike Coal & Coke Co., capital \$100,000; president, Charles E. Hellier of Boston, Mass.; manager, Lowry Lewis of Childress, Ky. This company also has two mines, one on the lower Elkhorn and one on the upper Elkhorn seam, with a capacity of 1500 tons a day.

"Henry Clay Coal & Coke Co., capital \$100,000; owned by Mr. William Beury of Philadelphia; Dr. Evans of Lookout, Ky., general manager; J. W. Cockill, Lookout, Ky., superintendent. This company has two mines, one on the upper and one on the lower Elkhorn seam, with a capacity of 1000 tons a day.

"The Edgewater Coal & Coke Co., capital \$100,000; president and general manager, George T. Honaker of Lookout, Ky. This company has two mines; capacity 1500 tons a day.

"The Marrowbone Coal & Coke Co., capital \$100,000; R. C. Peacock of Lookout, Ky., manager. Mr. Peacock was for many years associated with E. V. d'Invilliers, the eminent coal geologist and mining engineer of Philadelphia. He is associated himself with important Pennsylvania interests, and will develop mines with a capacity of upwards of 1000 tons a day.

"The Big Sandy Company has many more applications for leases, and its lessees are highly pleased with the coal and mining and railroad facilities."

Coal and Clay Lands.

The MANUFACTURERS' RECORD learns that the Elkatawa Fuel Co. of Lexington, Ky., has perfected organization by the election of the following officers: Messrs. C. F. Brower, Lexington, president; J. C. Patrick, Stanton, Ky., vice-president, and Frank G. Ott, Lexington, secretary and treasurer. The property to be developed consists of about 5000 acres of coal and clay lands on and near the Lexington & Eastern Railway. It is stated that the coal and clay are in the same stratum, the coal being 44 inches and the clay 41 inches thick. The products will be mined together, the coal to be shipped to central points in Kentucky and the clay to be manufactured into fire-bricks either at the mines or at Lexington. The property will also be developed for oil and gas.

Mr. C. G. Holmes of Columbus, Ohio, is the mining engineer, and, together with the officers and Messrs. John E. Patrick of

Jackson, Ky., and Harry F. Brower of Lexington, will constitute the board of directors.

Important Coal Enterprise.

An important enterprise has been projected at Fort Smith, Ark., by the organization of the Southern Smokeless Coal Co., which has been incorporated by local and St. Louis capitalists for the development of about 800 acres of coal land on the line of the Arkansas Western Railway Co. There is a mine of 300 tons daily capacity in operation on the property at Coaldale, Ark., and arrangements have been made to increase this to 1000 tons. It is stated that there is a vein of coal five feet four inches just about a two-foot stratum of slate, under which there is another vein of coal two feet thick. The stockholders and officers of the company are Messrs. George Sengel of Fort Smith, president; Edward A. Garvey, first vice-president, and Thomas A. Bell, second vice-president, both of St. Louis, Mo.; George Sengel, Jr., secretary, and Jerome Sengel, treasurer, both of Fort Smith.

To Develop Coal Properties.

The Raven Collieries Co. of Raven, Va., owns the coal property and mining equipment which was formerly operated by the Coal Creek Coal Co. The capacity of the mines at present is about 200 tons per day. No immediate improvements will be made to the plant, but the Raven Coal Co. will probably consider the installation of electric haulage and electric mining machinery by January 1, 1907. Officers of the company are Messrs. J. N. Harman, Tazewell, Va., president; H. J. Burnett, Raven, vice-president and superintendent, and J. N. Harman, Jr., secretary and treasurer. The principal office will be maintained at Raven.

Fuller's-Earth Deposits.

A dispatch from Somerville, Texas, announces that the Somerville Development Co. has discovered a large deposit of fuller's earth on its property located about one mile northwest of the city. The property is near the line of the Gulf, Colorado & Santa Fe Railroad, but it is said that shipping facilities will be increased by the construction of an electric railway line from Somerville to a reduction plant which it is contemplated to erect. It is understood that the plant will have a daily capacity of 200 tons.

Contemplated Copper Developments.

In connection with the construction of the Dalton & Alaculsy Railroad, reports of which are now current as coming from Dalton, Ga., it is rumored that the line will touch a copper-ore property controlled by the Westinghouse interests of Pittsburgh, Pa. The property is located near Allendale, in Murray county, and reports state that a large copper smelter will be erected.

Coal exports from the port of Baltimore, Md., during May amounted to 41,500 tons, an increase of 5625 tons as compared with the shipments for May, 1905. The value of last month's shipments is estimated at \$105,114.40.

To Represent Building-Supply Manufacturers.

Manufacturers of building equipment and supplies will be interested to know that a new company recently established in the South is prepared to represent them in that section. Those manufacturers who may desire to be represented are invited to correspond with a view to completing the necessary arrangements. The company referred to is the Spalding Company, of which A. T. Spalding, Jr., is manager; offices at 617 Austell Building, Atlanta, Ga.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

Southern Knitting-Mill Betterments.

The MANUFACTURERS' RECORD has received brief information during the past week regarding betterments in progress or contemplated by the owners of knitting mills located throughout the South. These may be referred to in a general way as follows: Climax Hosiery Mills, Athens, Ga., operating 103 machines with a daily capacity of 400 dozen pairs of hose, contemplates increasing capacity at an early date to 750 dozen; Lynchburg (Va.) Hosiery Mills, manufacturing 350 dozen pairs of half hose daily, now a copartnership, will soon incorporate with a capital stock of \$25,000; Jefferson Hosiery Mills, North Birmingham, Ala., operating 110 machines and having a daily capacity of 500 dozen pairs of seamless hose, is adding new machinery and a sprinkler system; John J. Tully, Louisville, Ky., who manufactures hand-knit hammocks and other articles, contemplates forming a stock company and operating on an enlarged scale; Unaka Knitting Mills, Johnson City, Tenn., manufacturing daily 150 dozen pairs of half hose, will install machinery and dye plant to make black goods, either 176 or 200-needle; Daisy Hosiery Mills, Burlington, N. C., manufacturing 275 dozen pairs of seamless hose daily, expects to install a dyeing and finishing plant; Grantville (Ga.) Hosiery Mills, operating 3000 spindles and 150 knitting machines, contemplates adding 2000 spindles; Regina Hosiery Co., Haw River, N. C., will add to its present equipment of 10 machines; Victor Hosiery Mills, Kernersville, N. C., will add 10 machines for manufacturing misses' and ladies' fine goods, present output being 375 dozen of 84-needle hose for women and heavy half hose for men; Georgia Underwear Co., Barnesville, Ga., contemplates doubling present plant of 35 machines with a daily capacity of 300 dozen pieces of ladies' knit underwear; Yadkin Knitting Mills Co., Lexington, N. C., contemplates adding 30 machines to present equipment of 25 machines; Lillian Knitting Mills Co., Albemarle, N. C., contemplates doubling present capacity of 250 dozen pairs of whole and half hose daily; Hickory (N. C.) Hosiery Mills Co., intends to double its 35 knitting machines as soon as operatives can be secured and will erect a dyeing plant later, its knitting mill not being prepared to operate before September 1, and Orion Knitting Mills, Kinston, N. C., has just completed improvements which cost \$28,000, the plant now having 150 machines with a daily capacity of 1000 dozen pairs of whole and half hose.

Georgia Manufacturers.

The Georgia Industrial Association at its meeting last week at Warm Springs elected Messrs. Jeff Davis of Toccoa, president; P. P. Meikleham of Lindale, vice-president; Charles D. Tuller of Atlanta, secretary and treasurer, and J. P. Verdery of Augusta, J. L. Hand of Pelham, F. E. Callaway of Lagrange, B. S. Walker of Monroe and W. J. Kincaid, executive committee. Addresses were made by Frank P. Sargent of Washington, D. C., commissioner-general of immigration; Mr. M.

V. Richards, land and industrial department Southern Railway; Commissioner of Agriculture E. J. Watson of South Carolina; Mr. J. D. Massey of Columbus, Mr. T. L. Wainwright of Mississippi, Mr. C. Rasmussen of Minneapolis, Rev. Dr. Young J. Allen of Shanghai, China, and the retiring president, Mr. F. B. Gordon of Columbus, on topics bearing directly and indirectly upon the textile industry.

The Clara Manufacturing Co.

In February the MANUFACTURERS' RECORD announced the formal organization of the Clara Manufacturing Co., which had been incorporated with a capital stock of \$100,000 to build a plant of 5000 spindles for the manufacture of cotton yarns. Recently the contracts for construction and machinery have been awarded, and the work is now in progress. Contract for erecting the 78x268-foot main building was awarded to John McAlester of Gastonia, N. C., where the plant will be located. This building will be heated by steam and lighted by electricity. Mr. Stuart W. Cramer of Charlotte, N. C. is the engineer in charge of construction and equipment. Officers of the Clara Manufacturing Co. are: President, R. P. Rankin; vice-president, George A. Gray; secretary-treasurer, C. B. Armstrong. Location of enterprise, Gastonia, N. C.

The Peerless Woolen Mills.

The Peerless Woolen Mills of Rossville, Ga., has been incorporated with a capital stock of \$100,000 by J. L. Hutcheson and associates. This is the company which will build the woolen mill referred to last week, when Messrs. Huntington & De Sabla, architects, of Chattanooga, Tenn., furnished plans and specifications for the plant. The buildings will be three of the size heretofore stated, and the mechanical equipment will include 7800 mule spindles, 10 sets of cards, 2000 ring spindles, 200 looms, etc., for the manufacture of cotton-warp cassimeres and plain jeans. Contract for erecting the buildings has been awarded to George Collins of Chattanooga, Tenn. The Peerless Woolen Mills has not yet elected officers, but J. L. Hutcheson, secretary of the Park Woolen Mills, is in charge at present.

South Carolina Mill Men.

Seventy-three presidents of cotton mills in South Carolina, representing 2,335,000 spindles, have organized the Cotton Manufacturers' Association of South Carolina, which is to take permanent form at a meeting to be held June 28. At the preliminary meeting held last week resolutions were adopted looking to a voluntary reduction of the running time of the cotton mills to 64 hours a week after July 1, 1906, to 62 hours a week after July 1, 1908, and to 60 hours a week after July 1, 1910, without reduction of wages consequent upon the change of hours, urging cotton-mill manufacturers to continue to carefully observe the law limiting the employment of children under a certain age and approving of a compulsory school law for such children.

A 10,000-Spindle Mill.

The MANUFACTURERS' RECORD is advised that plans which had been formulated for the organization of a cotton-mill company at Selma, N. C., have proven successful, and that full details regarding the new enterprise will soon be announced. Sufficient capital has been subscribed to insure the construction of a mill to be equipped with 10,000 spindles for the manufacture of hosiery yarns, and the stockholders will meet this week to effect permanent organization and apply for incorporation. Construction work is to begin by July 2 and the equipment

of machinery will be contracted for by July 14, for quick shipment. Mr. M. C. Winston, president of the Bank of Selma, and associates are organizing this company.

Improvements for Knitting Mill.

An important addition to the plant of the Columbus Underwear Co. of Columbus, Miss., is contemplated by the management of that enterprise. It is proposed to build a cotton-yarn mill of 5000 spindles and to add largely to the present knitting plant, which operates 1440 spindles, 49 knitting machines, etc. The company is capitalized at \$100,000, and now operates 1440 spindles and other machinery, employing 125 persons on the production of fleece-lined underwear, wool and cotton, the daily capacity being 300 dozen pieces. An improvement to be made at once is the installation of equipment for dyeing in the roll.

Cotton-Mill Site Offered.

Mr. C. W. Hare of Tuskegee, Ala., writes in substance that he has a tract of land reaching nearly to the corporate limits of the town of Tuskegee and containing in all nearly 1000 acres. On this tract, and within two miles of the center of the town, he has a good location for a cotton factory and a factory town, with plenty of good water for all steam and domestic purposes right close at hand. He offers to give to any bona fide company or individual who will build and operate a cotton factory of medium capacity 10 acres of this land and will sell as much more as may be needed at reasonable figures.

Proposed Spinning or Knitting Mill.

The establishment of either a mill for the manufacture of cotton goods or thread or for the production of knit goods is proposed by Moncure Dabney of Vicksburg, Miss. Mr. Dabney has a suitable location for the enterprise, the site including 30 acres of land on the Mississippi river and a two-story building, 32x45 feet, with a total floor space of about 2900 square feet. No architect or engineer has been engaged to prepare plans and specifications for the plant and Mr. Dabney wants to obtain complete details in this direction.

The Blue Ridge Knitting Co.

The Blue Ridge Knitting Co. of Hagerstown, Md., has decided to increase its capital stock from \$25,000 to \$150,000 and in connection with this will largely increase its capacity. It has begun the erection of an addition to its present plant of 200 knitting machines and has purchased the Black Rock Knitting Mills at Mechanicsburg, Pa. The Blue Ridge Company will also issue bonds for \$100,000.

The Elizabeth Manufacturing Co.

The Elizabeth Manufacturing Co. of Mooresboro, N. C., has been incorporated with a capital stock of \$60,000 for the purpose of manufacturing cotton yarn, cloth, etc. Its incorporators are Messrs. C. M. Cooke, Jr., of Kings Mountain, N. C.; S. S. Royster, D. B. McBrayer and others of Mooresboro, N. C.; C. C. Blanton and J. W. Wood of Shelby, N. C., and A. M. Lovelace of Ellenboro, N. C.

The McIntosh Mills.

The McIntosh Mills of Newnan, Ga., has been incorporated with a capital stock of \$200,000 by Messrs. W. C. McBride, T. G. Farmer, H. C. Arnall, H. C. Fisher, J. P. Jones, R. D. Cole, Jr., and a number of others. This is the company referred to last week as to be organized. Plans and specifications for the plant are now being prepared by a mill architect.

Textile Notes.

The Drexel (N. C.) Hosiery Co. expects to add a dyeing plant to its equipment, now 30 knitting machines, etc.

The Aycock Hosiery Mills of Paducah, Ky., will remove to South Pittsburg, Tenn., and there make extensive improvements.

The Baldwin Manufacturing Co. of Elk Mills, Md., will install 25 looms in the new weave building recently reported as under construction.

Reports from Villa Rica, Ga., state that J. T. Fuller of that city will build a cotton factory, and that site of 50 acres has been purchased for the plant.

It is reported that the Sherman (Texas) Cotton Mills Co. will increase its capacity in connection with an issuance of bonds to the amount of \$125,000.

Mr. W. B. Candler, Sr., and associates of Villa Rica, Ga., contemplate the establishment of the hosiery knitting mill mentioned last week, but have made no final decision.

The Blanche Knitting Mills of Chapel Hill, N. C., contemplates installing a dyeing plant for its mill of 51 knitting machines, etc., with daily capacity of 300 dozen pairs of half-hose.

The Waxahachie (Texas) Cotton Mills, referred to last week, will add 5000 spindles and 50 looms in connection with its enlargement of building, which was referred to last week. Mr. John Hill of Atlanta, Ga., is the engineer in charge.

The United States Ramie Fiber & Manufacturing Co. has been incorporated with capital stock of \$100,000 by Messrs. L. A. Murphy, L. S. Jones, H. A. Mulligan and others of Kansas City, Mo., for the purpose of cultivating and manufacturing ramie and other fibers.

The Waldensian Hosiery Mills of Valdese, N. C., will increase its capacity from 125 to 200 dozen pairs of hosiery daily during the year. This company at present has 45 knitting machines and employs 40 operatives. It dyes and finishes the product of its own plant and two other companies.

The Kansas City (Mo.) Cotton Mills Co. has secured permit for the construction of a brick building to cost \$20,000. This structure is to be added to the buildings which the company is now remodeling and equipping with machinery for cotton spinning, according to previous announcements regarding its mill.

Summer Tours by Sea.

The Merchants & Miners' Transportation Co. has gotten out its book of "Summer Tours by Sea" for 1906, which contains full information about many delightful journeys, each of which include a sea voyage upon the steamers of this company. The vessels of the line are thoroughly up to date in size, power, style and equipment, and this combination of excellence renders a voyage upon any one of them an experience to be remembered and repeated. The illustrations in the book, which are attractive and accurate, will assist travelers in reaching a decision concerning their trips. The steamers run between Baltimore, Norfolk, Savannah, Providence and Boston. W. P. Turner, general passenger agent at Baltimore, will send copies of the book to any address on request.

The Commercial Club of Kansas City, Mo., has adopted resolutions to organize a company with \$300,000 capital to operate a line of steel compartment non-sinkable freight boats on the Missouri river between Kansas City and the Mississippi river. It is also proposed to form the Missouri Valley Waterway Development Association.

MECHANICAL

Golden's Foundry and Machine Plant

The modern tendency among manufacturers is not only to produce their specialties as near mechanical perfection as possible, but to vie with each other in keeping the public informed in regard to their plants. Not only are the merits of the product made plain, but the processes of manufacture and the entire equipment of manufacturing plants are detailed.

boiler-house is run to boilers and weighed, enabling the fireman to know the exact amount of coal used.

Industrial railways run to the two smaller doors in machine shop, while regular cars run through large door. In the plant are large boring mills, taking pulleys or sheaves up to 16 feet; also an electric-driven keyseater of the latest type. The pattern shop is on second floor, where the 10-ton electric crane can reach it with large patterns, as well as serve the ma-

In the casting-cleaning room are a lot of 1000-gallon special vats for cotton mills, the average weight being about 6000 pounds each.

Cleaning-room is served by a six-ton crane with pneumatic hoist.

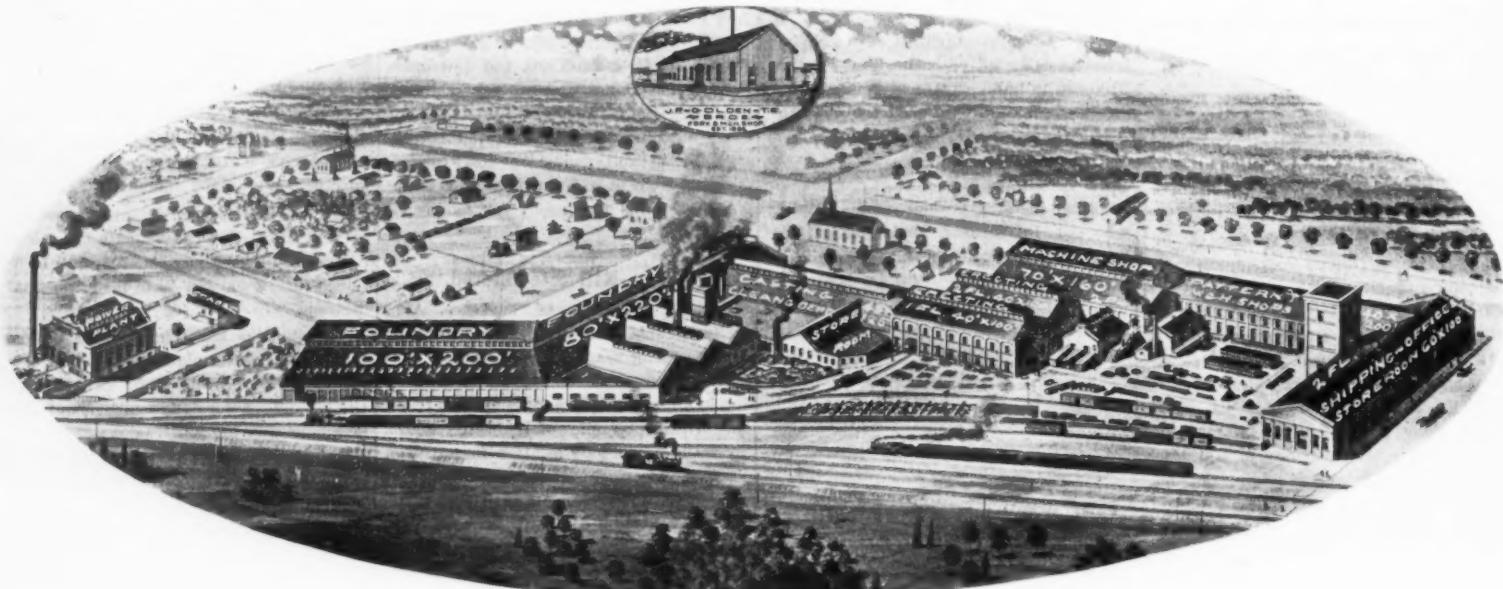
Large tumbling mills are located in cleaning-room for convenience to castings, while there is a group of 12 mills connected to fan exhaust for small castings in an adjoining room.

Ladies comprise one 10,000-pound, one

lifting bars, and one man can easily assemble and place in cars for shipping any mill in any line in view.

The two and three-roll patented vertical cane mills built are propelled by from one to four mules, according to size of mill, and are used by the small farmers. That they are appreciated is shown by the fact that the company's sales have tripled since introducing them to the trade.

The horizontal patented mill, with vertical shaft, is designed for those who re-



PLANT OF GOLDENS' FOUNDRY & MACHINE CO., COLUMBUS, GA.

In this connection it is of interest to refer to a leading Southern enterprise, Goldens' Foundry & Machine Co. of Columbus, Ga. This company's superintendent, J. P. Golden, and secretary-treasurer, T. E. Golden, established Golden Bros. in Columbus in 1882 in a one-story shop on Sixth avenue. The original shop, of which an illustration is presented, in company with the bird's-eye view of the present plant herewith, was 30x120 feet, the machine shop being 70 and the foundry 50 feet long. Incorporated in 1888, A. Illges, president of the company, joined the Goldens, the firm name being changed to Goldens' Foundry & Machine Co.

In 1890 a larger plant was needed. This site was chosen with special regard for receiving supplies and convenience in shipping, being located opposite the Central of Georgia depot, one block from the Southern Railway freight office and within a few blocks of the Seaboard Air Line. These railways have easy access to the coal yard at power plant and supply storage in foundry. One track runs entirely through the three buildings, located side by side; another track runs direct to shafting rack through yard.

The power plant would appear to be at some distance from the shops, but as there is a probability of extending the present foundry to it in the near future, and as the power plant generates electricity for separate dynamos in each department, the location makes little difference.

The generator-room has two units, consisting of direct-connected engine and generator, with space for a number more, as well as for a traveling crane to serve engines and dynamos. The electricity is generated here for operating and lighting the entire plant.

The boiler-room has two boilers, with space for several more, the 120-foot steel stack having a capacity of 600 horse-power to accommodate future installations.

The two feed pumps are located behind boiler. Feed-water heater is located in left-hand corner, with an industrial railway track scale in front, over which the charging car with coal from dump in rear of

chine shop below. The pattern shop is supplied with surfacing planer, joining planer, large band saw, jig saw, large and small wood lathes, trimmers, grindstone, etc.

Metal patternmaking department is on same floor as wooden patternmaking department. It is furnished with lathe, drill presses, emery grinders, flexible grinder, etc.

5000-pound and one 3000-pound ladle detachable from car, one 2500-pound ladle and two 2000-pound ladles attached to cars.

The variety of ladles, in connection with industrial railway and cranes, allows of distribution of metal to all parts of foundry in large or small quantities.

The cane-syrup industry in the South has shown the need of a better class of

quire a mill of more capacity than the vertical mills, but do not need a power mill, belt driven.

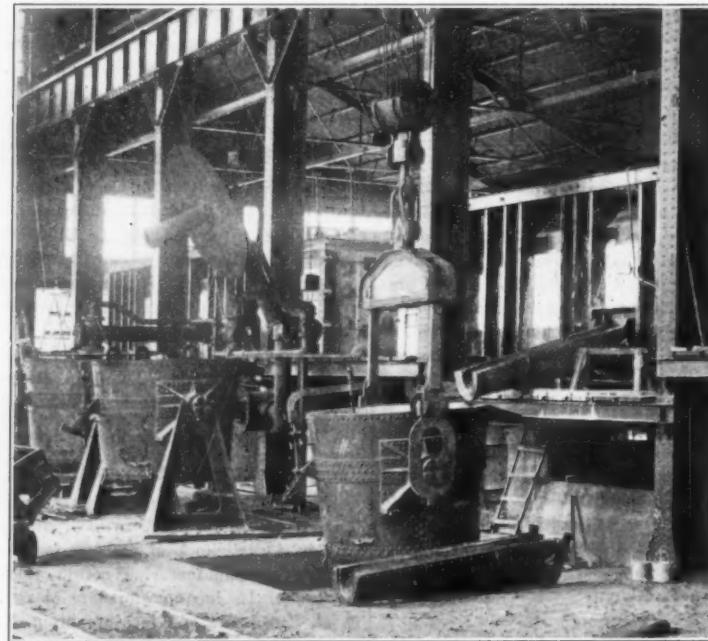
The large patented mill with internal gear and belt drive runs in weight from about 1600 pounds to 7300 pounds, and will extract from 3500 to 4000 gallons of juice per day from cane.

Complete ice-making plants of the ammonia absorption system are manufactured by Goldens' Foundry & Machine Co., which also uses machines of its own make in a 30-ton ice plant which is in continuous operation day and night, summer and winter. These ice machines are furnished from 5 to 50 tons capacity per day.

Power-transmission machinery and other mechanical equipment—the general line of a modern foundry and machine plant—is manufactured by Goldens' Foundry & Machine Co. of Columbus, Ga.

Atlanta Steel Hoop Co.'s Plant.

Recent extensive enlargements to a plant at Atlanta, Ga., constitute a development emphasizing the South's progress in the production of iron and its subsequent treatment—fashioning the product into the various forms essential in manufacturing and other branches of activity. The plant is that of the Atlanta Steel Hoop Co., which built a mill for rolling hoops and cotton ties in 1901 and two years later added a mill for making light steel rails, the sizes being 12, 16, 20, 25 and 30 pounds to the yard. These are still in operation, together with the enlargements recently completed, and to which special reference is interesting. The new mills are also in operation, altogether about 700 men being employed in and around the establishment. There are five steel structures varying in dimensions from 100x180 to 800x200 feet. The site contains 26 acres in the city limits, it and the buildings, equipment and installation having cost over \$1,000,000. The crude pig-iron is unloaded at one end of the material-receiving department, and after passing through the operations of annealing, rolling, reducing, drawing, cutting and polishing is turned out ready for use



POURING SIDE, SHOWING GREAT LADLES SUSPENDED FROM TRAVELING CRANE CONVEYING MOLTEN STEEL.—ATLANTA (GA.) STEEL HOOP CO.'S PLANT.

New part of foundry is of special heavy construction to accommodate the 25-ton electric crane for center and 10-ton electric cranes on each side.

Part of the pulley rim and arm racks are temporarily installed in one side bay until foundry is extended.

The larger sizes of pulley-rim racks are provided with roller bearings for ease in getting patterns in and out of racks.

mills than hitherto obtainable, and the Goldens' Foundry & Machine Co. has supplied this need with a set of new patented mills. It is evident that where mills with interchangeable parts are to be produced by the hundred special provision must be made for their manufacture. The erecting-room for small cane mills, although some of the small mills weigh 2000 pounds, is served by a system of trolleys, hoists and

at a point probably 1200 feet distant for the cleaning operation, and at the rate of 800 kegs daily.

In the handling of hoops, bars, bands

are located, together with a reversible blooming mill, engines, cranes, motors and reheating furnaces, built by the Wellman-Seaver-Morgan Company of Cleveland,

pumping outfit, condensers and feed-water heaters, all made by the Platt Iron Works of Dayton, Ohio.

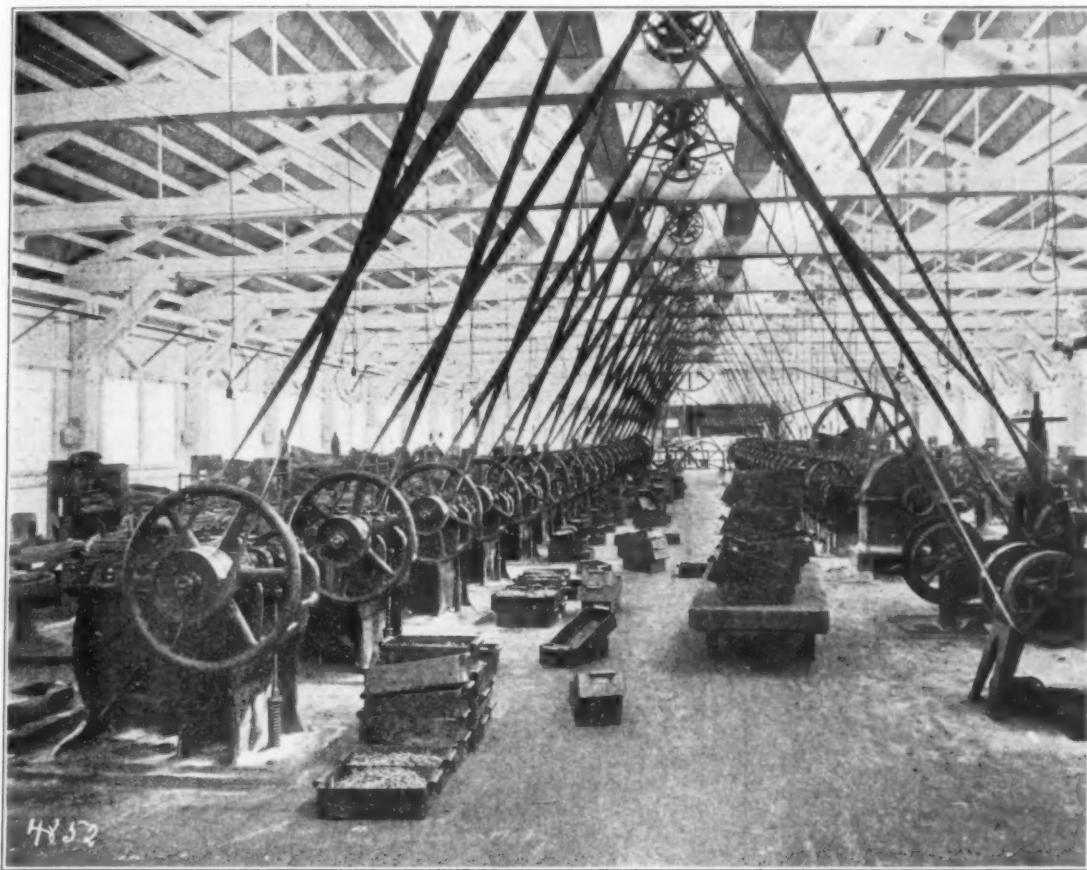
Double-acting pumps built by the John

from 200 pounds to 20 tons are installed in the different divisions.

Modern Portable Electric Hoists.

Substitution of power for hand work is especially productive of economy in moving material, and the electric hoist is found to meet the conditions. The electric hoist is an economical device, even where substituted for the cheapest of labor, and for either occasional or constant use, because of the modern investment of capital required, the low cost of operating and the facility with which it adapts itself to surroundings. Given a place to hang it, installation involves nothing more than suspension by a single swiveling hook and connecting the two wires for the current. A workman with intelligence enough to use the simplest tools can operate it. The cost of machinery and other material and the lives of operators frequently depend upon the integrity of a hoist, and the utmost care should be used in designing it.

Believing this, a prominent designer and manufacturer of modern hoisting equipment is marketing a portable electric hoist in which is used an intelligent choice of materials to insure the proper distribution of strains. Tensile strains on cast metal have been carefully avoided, and all the parts are made to gauge, thus securing complete interchangeability and consequent facility of replacement when broken or worn. All the electrical parts are tested to 2200 volts. The load is taken on wire rope of tough steel, wound on grooved drums and sheaves of large size, as specified by the rope manufacturer for this service, or in the case of chain hoists on special iron hand-made chains accurately gauged to size. The method of lubrication prevents heating or injury from the high temperatures usually existing near the ceiling. The portable electric hoist referred to is the Yale & Towne, manufactured by the Yale & Towne Manufac-



INTERIOR OF WIRE-NAIL MILL OF ATLANTA (GA.) STEEL HOOP CO.

and rails for the purpose of transforming them from the crude to the finished article the operations are dissimilar, and an entirely different class of machinery, such as mills, cutting and fashioning machines, is used. Asphalted floors run the length and breadth of the various divisions, and economical devices of various designs have been constructed and installed under special contracts.

There are 120 wire-nail machines of various sizes, type No. 36, made by the National Nail Machine Co. of Tiffin, Ohio. The system of treating the rods intended for wire-making is worthy of special mention. In a circular-shaped pit, large enough to hold six vats, the rods are submerged. Twelve bundles, 180 pounds each, constitute a lift. These are submerged and at the proper time hoisted with facility and without handling, because of their being handled in the portable vats. After the nails are cut to desired size, sawdust, water, salsoda and the rubbing or tumbling machines bring out the bright clear finish characteristic of well-made steel nails.

A main feature of the equipment is a complete semicontinuous Morgan rod mill, together with continuous heating furnaces. There are five engines for operating the mills, one a 1200 Cooper Corliss engine, built by the C. & G. Cooper Company of Mt. Vernon, Ohio, used exclusively for the machines making wire rods, steel hoops, rounds and squares. This latter, together with the mill installation work, as well as the erection of the steel construction, was executed by the Morgan Construction Co. of Worcester, Mass. The power is transmitted by means of a rope drive one and one-quarter inches in diameter.

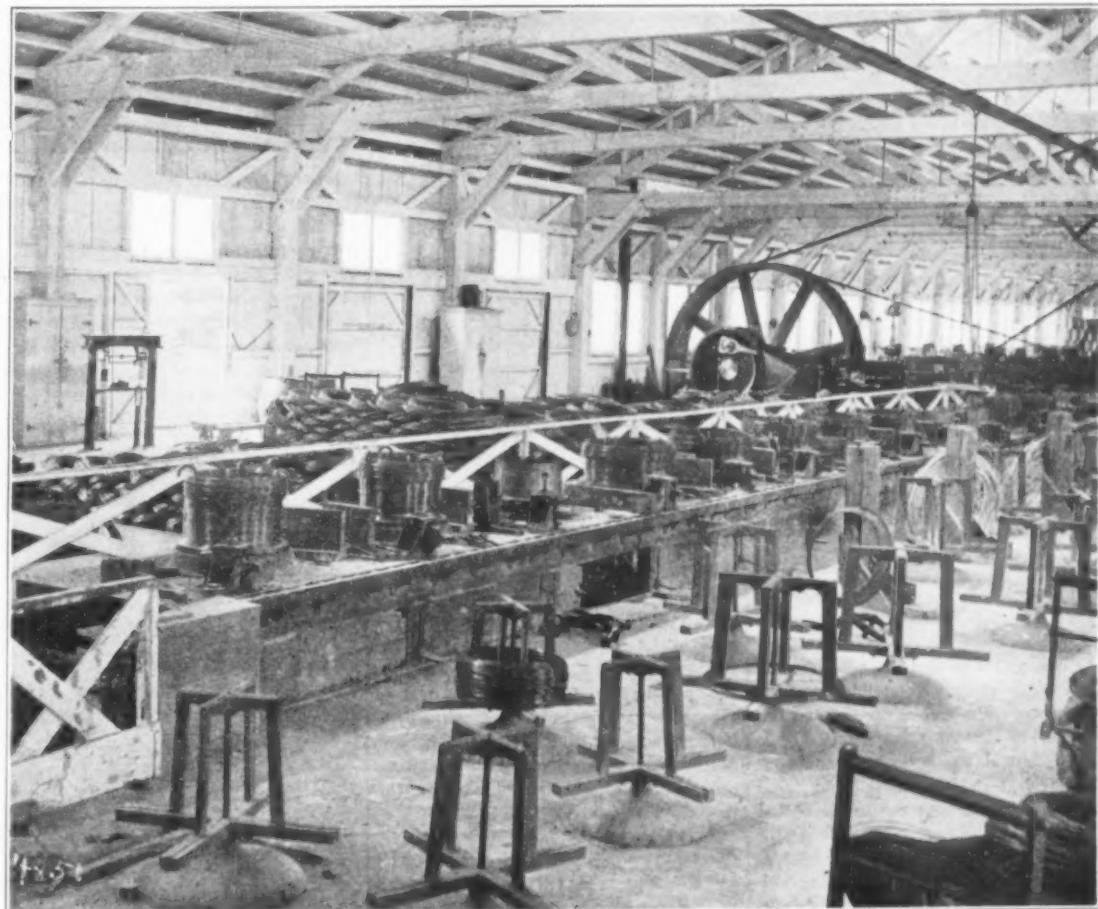
Electric cranes, lights and motors are fixed at various locations in the respective buildings, with traveling cranes overhead.

In one of the central steel-constructed buildings two 35-ton open-hearth furnaces

Ohio. This class of machinery and apparatus will furnish all sizes of billets from one and one-half to four inches square.

H. McGowan Company of Cincinnati, Ohio, are in use also.

In a steel building 100x180 feet is in-



INTERIOR OF WIRE-DRAWING PLANT OF ATLANTA (GA.) STEEL HOOP CO.

The boiler-house, also of steel construction, contains a battery of Munoz boilers, consisting of 3000 horse-power, with

stalled the steel gas producer, built by the Morgan Construction Co. of Worcester, Mass. Standard scales of various sizes

turing Co. of 9-15 Murray street, New York city; works at Stamford, Conn. An accompanying illustration presents a view

of a four-ton Yale & Towne portable electric hoist handling an ore bucket. This runs on an overhead trolley system, and illustrates the use of the hoist outdoors. The single operator handles and traverses this load horizontally, performing labor and handling tonnage which, it is claimed, would require from 9 to 15 laborers working with ordinary methods. There are many instances in which this hoist may be used outdoors after the manner of a chain block. Being portable and easy to wire, it should have a wide use for such service. A large Southern bridge and structural works has recently installed one of these hoists to handle I-beams and other structural material in the yards. Another illustration shows a two-ton Yale & Towne electric hoist hooked in a two-ton motor-driven trolley with trailer-cage attach-

short, and the traversing speed of the equipment is 350 feet per minute. A single operator with such an equipment could handle a large tonnage in a day, landing material at all parts of a works which may be covered by an I-beam system, incorporating switches, turntables and lateral spurs to all machines and storage locations. The particular illustration presented was photographed in a modern power plant in a large Southern city, the equipment being used for handling coal and ashes. Further information regarding the possibilities of the Yale & Towne portable electric hoists can be obtained from the company at its New York offices.

Positive Float Drive.

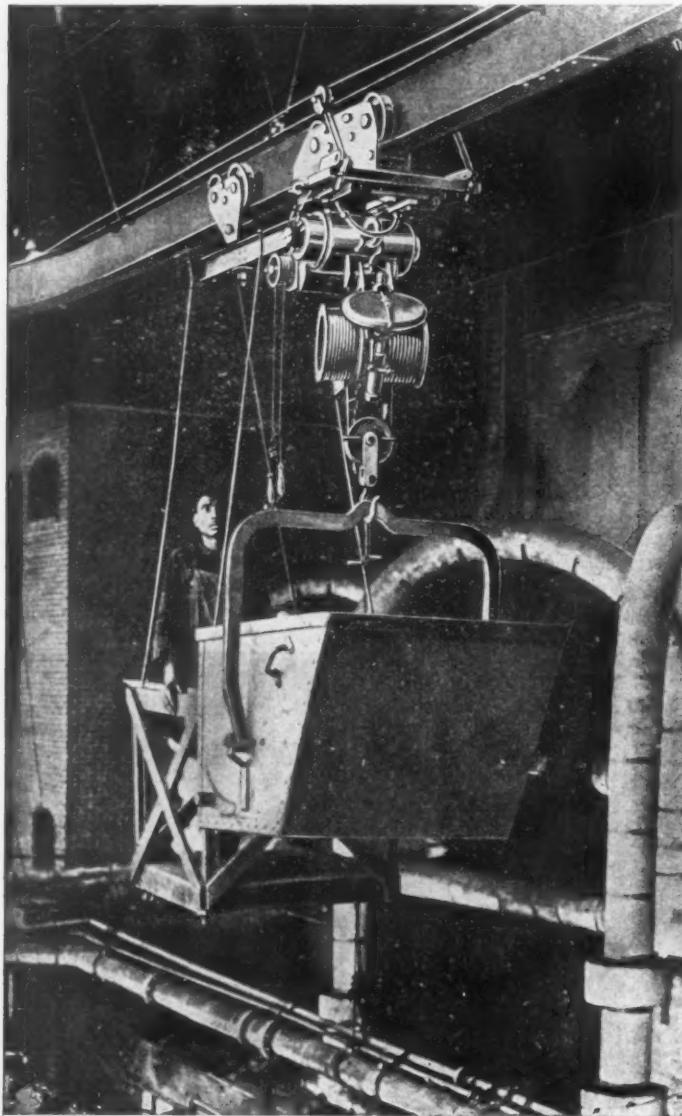
There has been for the past two years an increasing demand for a float drive that

piece that always throws out the clutch automatically, and it is thrown in again by the hand lever in front. It can be thrown in only when the gratefall is lowered.

The action of this drive is as follows: When the gratefall is lowered the bevel

Any density of roll desired may be carried. The gears are made of steel, and will transmit double the load that can ever be put on them.

It is simple, compact, practically no wearing parts, easily attached, with no adjustments to get out of order.

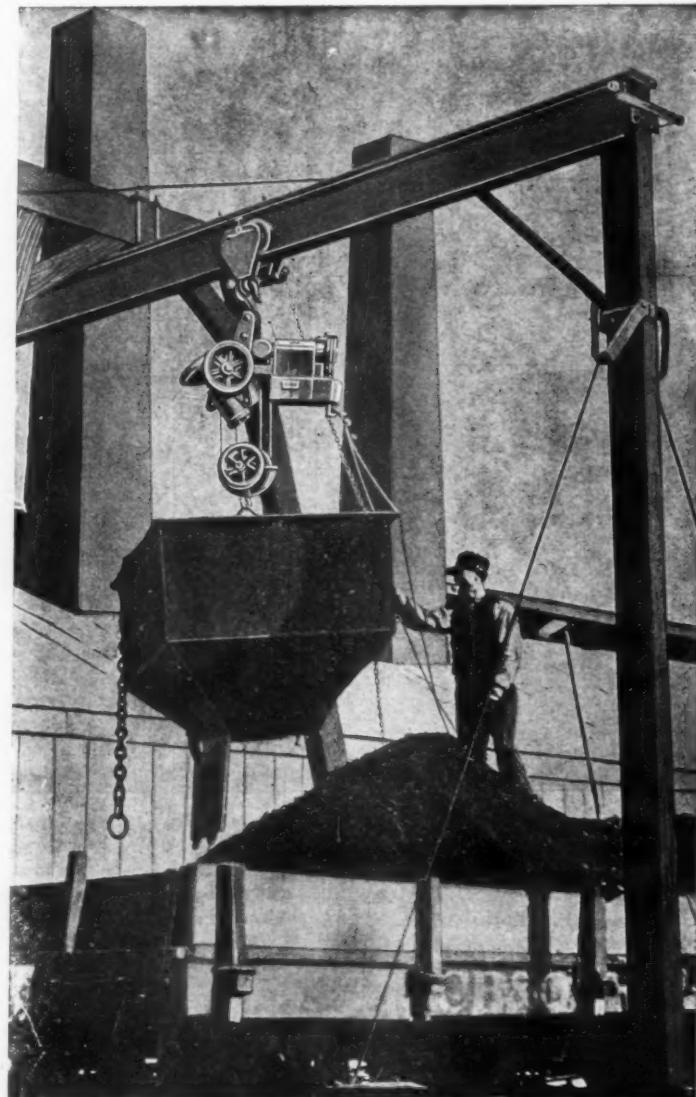


YALE & TOWNE PORTABLE ELECTRIC HOIST HOOKED IN MOTOR-DRIVEN TROLLEY HANDLING COAL AND ASHES.

ment. The trailer type is connected with the main trolley by a swiveling connection, so that the whole equipment will traverse short-radius curves. The trailer attachment is supplied so that the user can substitute a special trailer cage instead of the regular one. The trailer cage shown has been made to drop low enough for the operator to control the horizontal movement of the trolley and the hoisting movement from the cage and manipulate the bucket for load from the cage. A motor trolley hoist of this character can also be used as a locomotive for pushing or pulling several loaded trolleys along the I-beam runway. Such a system can reach all parts of a plant, warehouse or yard, handling material to and from nooks and corners which cannot be reached with overhead traveling cranes, industrial railways or trucks. The headroom occupied is very

would permit of carrying a denser roll. Believing that former devices put on the market did not satisfactorily meet the demand, the Carver Cotton Gin Co. of East Bridgewater, Mass., has been experimenting on a number of devices that would do the work satisfactorily, and with little change could be attached to linters now out. After thorough tests the company adopted the drive illustrated herewith, the positive float drive.

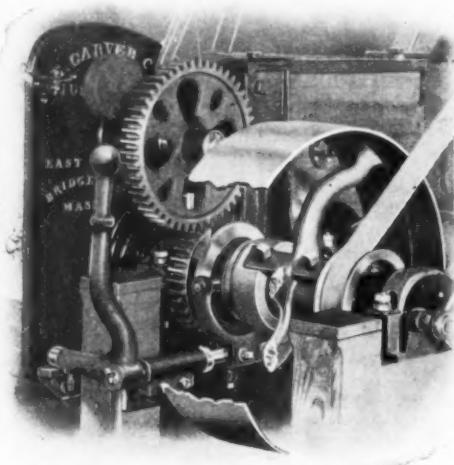
This drive consists of a male and female friction of regular Carver type, fitted on one end of float shaft. On the other end is a gear keyed to the shaft. This gear engages with a loose gear on the saw cylinder shaft, which, however, has on its face clutch teeth that may engage with a clutch sleeve on the saw cylinder shaft and driven by the main driving pulley. There is a plate cam fastened to the gratefall bottom-



YALE & TOWNE PORTABLE ELECTRIC HOIST AT A SMELTER HANDLING ORE BUCKET.

frictions come in contact and the float is almost instantly started nearly to speed; the clutch is then thrown in and the balance of the load is taken up by the gears and a positive drive is secured. Both

Civil engineers of Tidewater Virginia have organized the Associated Engineers and Constructors' Society with Messrs. E. B. Noyes of Portsmouth, president; Lee Shafer of Suffolk, vice-president; Niel



POSITIVE FLOAT DRIVE.

gears are at rest (not running) when they come in mesh.

The gears are the correct pitch to give the proper speed to obtain the greatest yield of lint, as size of float shaft has been greatly increased.

Melick of Norfolk, treasurer; C. K. Anderson of Portsmouth, secretary, and Adolph Wagner of Newport News, director.

The League of Georgia Municipalities is in session this week at Athens.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

DISTILLING TURPENTINE.**Securing Valuable Products from Stumps and Refuse.**

[Special Cor. Manufacturers' Record.]

Lake Charles, La., June 9.

The Calcasieu Long Leaf Lumber Co., Lake Charles, La., is operating a turpentine plant at that point which for superior equipment in the matter of up-to-date apparatus ranks among the highest in that business. The turpentine industry is conducted under the designation of the Lake Charles Chemical Co., and while it is owned by the Calcasieu Long Leaf Lumber Co., it is run as a distinct and separate business. The cost of the plant as it stands today is about \$70,000.

The process by which the turpentine is taken from the pine is by steam pressure, similar to the method used in creosoting, and is condensed by means of a coil condenser. The oil and water come together, the separation being an easy matter, as the oil rises to the top. After the turpentine is drawn off the wood is further heated without the use of steam, and produces tar and charcoal. A non-condensable gas is formed during the latter process.

The material used for distillation purposes is composed of stumps and refuse from the Calcasieu Long Leaf Lumber Co.'s mills, which are located on either side of the plant. They are carried by barge to a wharf which has been erected to receive them and handled by a steam crane. A small mill has been built on the wharf, which cuts the material up into short lengths and is then delivered by an endless chain into a steel bucket, which is also operated by a crane and dumped into a car. They have a tremendous steam axe for working up the stumps and blocks. After being loaded the car is then taken along an elevated track to a battery of horizontal retorts with removable heads. The cars then run into the cylindric retort, and after being closed tightly are ready for the first process which produces the turpentine. A fire is started underneath the retort until steam turpentine is reached. Steam is then turned on and the oil is drawn off through the copper coil condensers.

It is probably one of the most complete plants of its kind ever constructed, and is supplied with independent water, electric-light and fire service. The floors are of cement, and everything from foundation to roof is of the most substantial form. At some distance from the main plant a large warehouse has been constructed for receiving the product. There is also a large steel tank with a capacity of 40,000 gallons. The plant has a capacity of from 15 to 20 cords per day.

There is a great variety in the amount of turpentine secured from a cord of wood, the amount of heart or fat in the raw material being the controlling factor in that respect. For illustration, a cord of pine stumps and slabs on a test weighing at the Lake Charles chemical plant recently amounted to 1900 pounds. This was of an inferior variety, and for that reason should be rejected, as it is impossible to distill from such material sufficient oil of turpentine and other by-products to pay cost of extraction, not to speak of a fair profit. Another cord of better material weighed out 3600 pounds. It is such grade as latter that turpentine plants should use exclusively when possible. The character of the work executed on a month's test at the plant of the Lake Charles Chemical Co. carefully carried out is as follows: From 8½ to 9 gallons of first-grade water-white turpentine is obtained, also 3 gallons of

second-grade turpentine and from 65 to 80 gallons of tar or dead oil. To this should be added from 600 to 800 pounds of charcoal, or about 25 per cent. of charcoal to the average.

The water-white turpentine is the best grade possible to make, and for varnish, boiled oil and paint-making purposes it is a faultless product.

The second-grade oil can also be used for work of a less important nature, such as in the preparation of paints and varnishes for rough or outdoor service.

The manufacturing operations of the Lake Charles Chemical Co., under the management of General Manager S. T. Woodring, who is also treasurer and general manager of the Calcasieu Long Leaf Lumber Co., a \$4,500,000 organization, is carried on systematically and in strict accordance with the most advanced scientific principles in that line. JOHN BANNON.

May's Building Record.

Reports from Southern and Southwestern cities indicate that progress in building operations during May throughout these sections steadily increased. In San Antonio, Texas, building activity was particularly brisk during the month, 149 permits having been issued, representing a value of \$110,535. According to the annual reports of the city assessor and city building inspector for the fiscal year ending May 31, San Antonio's building improvements during the year represented an estimated value of \$1,021,807, an increase over the previous year of \$327,840. Building permits were issued in New Orleans, La., to the number of 142 with a value of \$455,928, while the city secretary of Galveston, Texas, issued 32 permits valued at \$25,100. In Chattanooga, Tenn., there was an increase of \$18,000 in the value of buildings and improvements as compared with May, 1905. For the fiscal year ending May 31 the value of permits which were issued for buildings costing more than \$1000 each is estimated at \$1,151,880 and for other improvements \$375,000. Operations at Selma, Ala., were remarkably active, as is shown by the fact that permits issued during May were more than double those issued during March. The estimated value of these improvements is \$37,065. Figures of Building Inspector R. J. Tilford of Louisville, Ky., show that a total of 312 permits was issued valued at \$495,975. For the nine months of the present fiscal year building operations exceed those of the same period last year by \$1,777,635. The total for the year 1904-1905 to May 31 was \$2,525,437, as against total of \$3,703,172 for the same period of the year 1905-1906. For the entire fiscal year of 1904-1905 ending August 31 Louisville's building improvements were valued at \$3,985,079. Building Commissioner Smith of St. Louis, for May, reports that there was an increase of \$276,808 over the corresponding month last year. The total estimated cost of buildings for which permits were issued in May, 1906, was \$2,163,225, as compared with an estimated value of \$1,886,447 for May, 1905. The total number of permits issued for both brick and frame structures was 630. An increase of \$919,965 in the estimated value of buildings for which permits were issued in Atlanta, Ga., for the first five months of the present fiscal year over the same period last year is shown by figures of Building Inspector F. A. Pittman. The total number of permits issued during this period was 1489, with a valuation of \$2,221,313. For May 351 permits were issued, representing an estimated value of \$587,861. Knoxville, Tenn., had a very good building month. Permits issued for improvements within the city limits alone, not

including minor repair work, etc., amounted to \$120,900. The most important building for which a permit was issued was the W. D. Wright apartment-houses, aggregating an estimated value of \$30,000. The annual report of building operations in Asheville, N. C., has not been prepared, but it is estimated that during the fiscal year ending June 1 permits for structures have been issued aggregating in value more than \$1,000,000. It is stated that this amount will exceed that of any previous year by more than \$400,000. A marked increase in the amount of building activity is noticeable in Wheeling, W. Va. It is estimated that the value of building construction in new business and residential buildings, manufacturing plants, etc., will aggregate about \$1,500,000 for the year, which figures show an increase over previous years of several hundred thousand dollars.

Basket Factories for Vicksburg.

A large and thoroughly-equipped basket factory which will doubtless be of much importance to the industrial development of South Vicksburg, Miss., has been planned for erection by the G. F. Conant Manufacturing Co. It is understood that construction work on the plant will begin in the very near future, the building to be modern in every respect and practically fireproof. Mr. E. L. Grover will have charge of the factory, and will, it is stated, employ more than 150 men in its operation. In this connection it is interesting to note that the Vicksburg Veneer Co. has completed and put in operation its veneer plant, which has been under construction for some time. This enterprise represents a large investment, but one which promises good returns to its promoters, as the entire output of the plant, it is understood, has already been sold for several months ahead.

To Locate at Malvern, Ark.

Reports state that the Owosso Manufacturing Co. of Owosso, Mich., which recently lost the principal buildings of its plant by fire, has determined to locate at Malvern, Ark. The company has, it is stated, secured an option on a site and has made arrangements for connecting its proposed plant with the lines of the Rock Island Company and Iron Mountain Railroad.

Sold to Canadians.

A dispatch from Mt. Sterling, Ky., states that N. H. Trimble of that city has sold a tract of 2600 acres of oak timber in Menifee county to a lumber company of Ontario, Canada. It is stated that the timber, which is of a good quality, will be cut and sawed and shipped north to the lakes. The yellow-pine timber on the tract has also been sold.

Wants Desirable Location.

A company desiring a suitable location where gum and other hardwoods can be obtained for a mill cutting from 25,000 to 50,000 feet per day may be addressed as the B. G. Co., care of the MANUFACTURERS' RECORD. The company would not object to purchasing a mill already in operation if well located.

Ready to Fill Orders.

The Louisburg Wagon Co., Louisburg, N. C., announces that it is in a position to accept orders and furnish regularly first-class kiln-dried ceiling, flooring and roofing, and desires to contract for the sale of a choice lot of gum lumber cut to order.

Wants Pennsylvania Red Maple.

A Southern manufacturing company wants Pennsylvania red maple lumber in 7-4, 8-4, 9-4 and 10-4 sizes. Correspond-

ence may be addressed to No. 803, care of MANUFACTURERS' RECORD.

Lumber Notes.

It is stated that McPherson Bros. of Detroit, Mich., have sold 900 acres of timber land near Richburg, Miss., to the Enon Lumber Co., which has a mill in that locality.

Messrs. Cambry Bros. of McComb City, Miss., are reported to have purchased a site for a scroll-work plant near Jackson, Miss. The proposed plant will employ from 20 to 30 workmen.

The British steamship Dunkeld cleared from Jacksonville, Fla., last week with a cargo of 6000 packages of resin for Neuhausen, Prussia, and 300 barrels of spirits of turpentine and 250 packages of resin for Rotterdam, Netherlands.

Local exporters are loading the British steamer Senator at Pensacola, Fla., with a cargo of over 3,000,000 feet of lumber and timber for European ports. The vessel will also carry several thousand barrels of resin and turpentine consigned by the S. P. Shatto Company.

The Hillsdale Turpentine Co., Ltd., of New Orleans, La., has been incorporated with a capital stock of \$500,000 for the purpose of engaging in naval-stores operations, etc. Officers of the company are Messrs. W. B. Gillican, president; C. E. Redman, vice-president, and E. Wood, secretary and treasurer.

For a Fertilizer Plant.

The Planters' Phosphate & Fertilizer Co. of Charleston, S. C., which was organized several months ago, has now completed details for the erection of its plant to have a capacity of 40,000 tons per year. Contracts for the erection of the plant have been awarded to the N. P. Pratt Laboratory of Atlanta, Ga., the announcement being made that engineers are already at work on the plans and specifications and construction work will begin within a few days. The plant will be located on the Kinsman farm on the Ashley river, and will have a river frontage of 850 feet, with convenient docking facilities. Side-tracks now connect the site with the Atlantic Coast Line Railroad, and a track will be constructed to the line of the Southern Railway. The company is capitalized at \$300,000 and has the following officers: Messrs. W. H. Welch, president; J. A. Ball, vice-president; J. D. Koster, treasurer; J. R. Hanahan, manager, and W. B. Simmons, superintendent. The company owns about 1200 acres of rock land, and expects to have an output of 15,000 to 18,000 tons of rock annually. The plant is to be in operation within six months.

Wants Plans and Specifications.

An opportunity for an architect is comprised in information which the MANUFACTURERS' RECORD has received regarding a school building to be erected by the town of Centerville, Miss. Plans and specifications for the structure, to cost not more than \$12,000, are wanted. Address Dr. J. C. Robert, mayor.

At the annual convention next week at Lithia Springs of the Cottonseed Crushers' Association of Georgia addresses will be made by State Commissioner of Agriculture T. G. Hudson, John M. McCandless, chemist of the State agricultural department; C. L. Willoughby of the State experiment station, and others.

The Pressed Steel Car Co. of Pittsburgh has just completed the first of three steel passenger cars ordered by the Southern Railway. Only the interior finish is of wood. This is said to be the first steel passenger coach built for any of the large steam railroads.

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY.

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "rumored" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY.

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECTLY.

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

ALABAMA.

Birmingham—Fireproofing.—Continental Fireproofing Co. has incorporated with an authorized capital stock of \$10,000 to engage in cement, fireproof, brick and steel construction. Thomas C. Cairnes is president; A. M. Hildebrandt, vice-president and general manager; W. A. Devles, secretary, and L. W. Milner, treasurer.

Birmingham—Sewerage System.—C. M. Burkhalter & Co. have contract at \$253 for installing a branch line of trunk sewers.

Birmingham—Manufacturing, etc.—Incorporated: Mineral City Trading Co., with \$9000 capital stock, by L. R. Shirk, C. M. Mc Machen and W. M. Franklin.

Birmingham—Iron and Steel.—Big Sandy Iron Co. has amended charter, changing name to the Big Sandy Iron & Steel Co., and increasing capital stock from \$50,000 to \$1,050,000. W. P. Pinckard is president.

Birmingham—Coal Mines.—Delmar Coal Co. has been incorporated with an authorized capital stock of \$25,000. W. T. Simmons is president; L. J. Haley, Jr., vice-president, and J. R. Cook, secretary-treasurer.

Clinton—Cotton Gin.—J. S. Brown and others have incorporated the Clinton Gin Co. with \$5000 capital stock.

East Lake—Realty Company.—Finch Realty Co. has been incorporated with \$6000 capital stock. J. H. Finch is president; George C. Davis, vice-president, both of East Lake, and G. C. Ellis of Avondale, Ala., secretary-treasurer.

Florence—Chair Factory.—It is reported that Northern capitalists are negotiating with A. D. Bellamy of the Florence Wagon Works relative to the establishment of chair factory.

Florence—Street-paving.—Arrangements are being made for paving sidewalks on various streets with cement. E. G. Negley is city engineer.

Mobile—Water-works.—At a meeting of the general council it was decided to purchase the plant of the Bienville Water-Works Co.

at \$350,000, and an election will be held August 6 to vote on same. Pat J. Lyon is mayor.

Sheffield—Stove Foundry.—Lizzie Lowman Company has been organized with \$40,000 capital stock by B. J. Lowman, S. A. Lowman and J. L. Andrews to manufacture stoves.

Troy—Telephone System.—Orion Telephone Co. has been organized with W. C. Starke of Troy, president, and W. G. Chancy of Orion, Ala., secretary-treasurer, to build a telephone line from Troy to Orion.

ARKANSAS.

Arkadelphia—Sewerage System.—City is considering the construction of sewerage system at a cost of \$30,000. Address The Mayor.

Berryville—Hardware Company.—Walker Hardware Co. has been incorporated with \$200,000 capital stock by William Walker, C. E. Walker and others.

Coalton—Coal Mines.—Southern Smokeless Coal Co. has been incorporated with \$150,000 capital stock. It has purchased 800 acres of coal land near Coalville, on which a mine is now in operation producing 300 tons daily, and arrangements will be made for increasing the capacity to 1000 tons daily. George Sengel is president; Edward A. Garvey, vice-president, both of St. Louis, Mo.; George Sengel, Jr., secretary, and Jerome Sengel, treasurer, both of Fort Smith, Ark.; main office, Fort Smith, Ark.

Fayetteville—Sewerage System and Street-paving.—City is arranging to install sewerage system and pave some of the principal streets with brick. J. W. Massengale, secretary Commercial League, can be addressed.

Fort Smith—Telephone System.—Pan Telephone Co. will make application for franchise for installing underground telephone wires.

Fort Smith—Street-paving and Sewerage.—Arrangements for paving 50 or more miles of street with brick and laying 50 or more miles of sewer have been completed, and bids for the work will be asked early in July. About six miles of the sewer will be built of brick or cement. Approximately one mile will be 15 feet and the remaining miles will be from three to six feet in diameter. S. A. Mitchell, engineer, was mentioned recently as making surveys, etc. Board of improvement of sewer district No. 2 and paving district No. 5 will have the work in charge.*

Gravette—Mineral Lands.—Big Black Bear Development Co., reported incorporated last week with \$50,000 capital stock, will develop mineral lands in Benton county. G. W. Vandervelde is president; G. W. Dunbar, vice-president; E. R. Glenn, secretary-treasurer; main office, Suite 308-309 Kemper Building, Kansas City, Mo.

Hartford—Coal Mines.—Chartered: Arkansas Smokeless Coal Co., with \$10,000 capital stock, by J. A. Harp, W. C. Harp, M. B. Harp and others.

Lake Village—Street-paving.—Board of Improvement will let contract July 1 for constructing about 52,000 square feet concrete walk.*

Langley—Water-power-Electrical Plant.—Southern Power & Development Co. reported incorporated last week under Altus, Ark., with \$50,000 capital stock, will develop water power near Langley. It proposes to build a concrete and masonry dam 50 feet high and 35 feet wide at bottom and 235 feet wide at top, from which about 500 horse-power will be developed for transmission by electricity to Black Springs, Ark., for operating saw-mills, mining and furnishing light and power. Will probably also transmit to Mena, Ark. D. A. Allen of Altus, Ark., is president; John Allen of Langley, vice-president, and J. D. Crockett of Denning, Ark., secretary-treasurer; main office, Denning, Ark.

Magnolia—Saw-mill.—Magnolia Manufacturing Co. is the title of company reported last week to be organized to operate saw-mill. About \$5000 will be expended in building and equipment. E. H. Davies is president, and C. E. Schumaker, secretary-treasurer.*

Malvern—Screen Doors and Snow Shovels.—Owosso Manufacturing Co. of Owosso, Mich., manufacturers of screen doors and snow shovels, it is reported, contemplates locating plant at Malvern.

Pine Bluff—Saw-mill.—Yingling Bros. of Monroeville, Ohio, who recently purchased a tract of 3500 acres of timber land in Cleve-land county, Arkansas, will arrange for the erection of hardwood mill.

Rosie—Cotton Gin, Saw-mill, etc.—Rosie Mill & Gin Co., previously reported incorporated, will operate cotton gin and saw-mill with a daily capacity of 20,000 to 25,000 feet. A ginhouse 20x42 feet, cotton-house 24x32 feet and seedhouse 16x24 feet are being erected.*

Silicon Springs—Publishing.—John E. Brown, Lovic P. Law, C. P. Curry and others have incorporated the Revival Publishing Co. with \$10,000 capital stock.

Texarkana—Bridge Construction.—City council has voted to build two bridges at a cost of \$3070.56.

FLORIDA.

Hastings—Drainage System.—Surveys are being made for a system of shallow drains to free about 45,000 acres of land from overflow after heavy rains. Robert Ranson of St. Augustine, Fla., is in charge of the work.*

Jacksonville—Iron Mines.—E. T. Le Baron, P. O. Box 983, and associates are organizing company to develop deposits of iron oxide.*

Odessa—Saw-mill.—Miller-Lutz Lumber Co., reported incorporated last week with \$50,000 capital stock, will manufacture pine lumber, having a daily capacity of 40,000 feet. A frame building 40x160 feet will be erected. About \$28,000 will be invested. Machinery has been purchased.

GEORGIA.

Abbeville—Cotton Gin.—It is reported that Shackelford Bros. & Philipy of Athens, Ga., will erect cotton gin.

Aeworth—Water-works and Electric-light Plant.—City has voted affirmatively the \$23,000 bond issue for the construction of water-works and electric-light plant, previously reported. Address The Mayor.

Athens—Knitting Mill.—Climax Hosiery Mills contemplates increasing capacity from 100 dozen to 750 dozen hose daily; present equipment 702 machines.

Atlanta—Bakery.—Chartered: Nathan Home Bakery, with \$30,000 capital stock and privilege of increasing to \$100,000.

Atlanta—Hardware.—Chartered: Dinkins-Davidson Hardware Co., with \$200,000 capital stock, by S. C. Dinkins, E. A. Davidson, Lawson Davidson and others.

Atlanta—Street-paving.—City is considering paving Peachtree street with asphalt or creosoted block. Address City Engineer.

Atlanta—Hat Factory.—American Hat Manufacturing Co. has been incorporated with \$15,000 capital stock by B. Goettinger, Herman Cohen and others.

Augusta—Publishing.—Labor Advocate Publishing Co. has been incorporated with \$500 capital stock by C. W. Holliday, J. P. O'Hara and others.

Barnesville—Knitting Mill.—Georgia Underwear Co. contemplates doubling its plant; present equipment 35 machines for underwear.

Carrollton—Public Improvements.—City will vote July 9 on issuance of \$40,000 sewer, city hall and street-improvement bonds. Address The Mayor.

Decatur—Road Improvements.—De Kalb county is reported as to issue \$250,000 of bonds for improving roads. Address County Clerk.

Grantville—Hosiery Mill.—Granville Hosiery Mills contemplates installing 2000 additional spindles; present equipment 3000 spindles, 150 knitting machines, etc.

Hazlehurst—Cottonseed-oil Mill.—Hazlehurst Cotton Oil Co. has been incorporated with \$15,000 capital stock. J. C. Bennett is secretary-treasurer.

Hazlehurst—Saw-mill and Woodworking Plants.—Frazier-De Foor Lumber Co., recently organized with J. J. Frazier, president, and H. E. De Foor, superintendent, will manufacture lumber, interior finish and general variety of woodwork; daily capacity 25,000 feet rough lumber. A frame building, 50x75 feet, with boiler-room and dry-kiln, will be erected. Equipment has been purchased.

Lagrange—Steam Laundry.—It is reported that C. C. Fawcett of Montgomery, Ga., will establish steam laundry.

Lumber City—Lumber Mill.—Telfair Manufacturing Co. has reorganized with Henry G. Woolf of Chambersburg, Pa., president, and C. H. Crumline, general manager. It is proposed to enlarge the plant and install new machinery.

Lumpkin—Electric-light Plant.—City will vote July 9 on \$5000 bond issue, recently mentioned, for the construction of electric-light plant; this amount to be supplemented with

\$2000 or \$3000. No arrangements have as yet been made for the work. J. B. Richardson is mayor.

Newnan—Cotton Mill.—McIntosh Mills, reported last week, has been incorporated with a capital stock of \$200,000 by W. C. McBride, T. G. Farmer and others. An architect has been engaged to prepare plans and specifications.

Norman Park—Public Improvements.—Town will vote on a \$15,000 bond issue for installation of sewerage system, extending water-works and erecting school building. Address Town Clerk.

Rossville—Woolen Mill.—Incorporated: Peerless Woolen Mills, with capital stock of \$100,000, being the company reported last week as having received plans and specifications for woolen mill previously referred to. Construction contract has been awarded to George Collins of Chattanooga, Tenn. Buildings will be of size stated heretofore, and the equipment will include 7800 mule spindles, 2000 ring spindles, 10 sets of cards, 200 looms, etc., for manufacturing cotton-warp cassimeres and plain jeans. J. L. Hutcheson is in charge at present.

Social Circle—Electric-light Plant.—Town has voted affirmatively the proposed bond issue for electric-light plant. Address Town Clerk.

Toccoa—Bottling Plant.—Falls City Manufacturing Co. has been incorporated with \$10,000 capital stock by J. T. J. Clark, S. F. Roberts and others to manufacture and bottle carbonated drinks.

Vienna—Water-works.—Arthur Pew, consulting engineer, Atlanta, Ga., is preparing plans for construction of proposed water-works, for which \$20,000 is available. B. F. Forbes is chairman board of commissioners.

Villa Rica—Cotton Mill.—It is reported that J. T. Fuller will build a cotton mill.

Villa Rica—Hosiery Mill.—W. B. Candler, Sr., and associates contemplate the establishment of the hosiery knitting mill mentioned last week, but have made no final decision.

White Stone—Marble Quarries.—Crystal Marble Co. has been organized with \$50,000 capital stock to work the Talona marble quarry. A. S. J. Hall is president and general manager; W. E. Hunter, vice-president, and H. B. Crawford, secretary-treasurer.

KENTUCKY.

Ashland—Electric-light Plant.—Ashland Interurban Railway Co. has secured franchise for constructing electric-light plant.

Clinton County—Coal and Timber Land.—W. K. Azbill of Columbia, Ky., and associates have purchased 4000 acres of coal and timber land in Clinton county for development purposes; work to begin about July 1.*

Clay County—Timber Development.—G. G. Brown of Jackson, Ky., has purchased a tract of timber land and will install mills.

Lexington—Machine and Boiler Shops.—Locke Bros. of Muncie, Ind., contemplate building machine and boiler shops this season. Previous mention has been made of Locke Bros. securing option on site for the location of boiler factory.

Lookout—Coal-mining.—Marrowbone Coal Co., R. C. Peacock, manager, will develop coal mines with a capacity of 1000 tons daily; capital \$100,000.

Louisville—Knitting Mill.—John J. Tully, manufacturer of hand-knit hammocks, etc., contemplates organizing a stock company and operating on a larger scale.

Louisville—Contractors' Equipment.—Continental Car & Equipment Co., main office, 17 Battery Place, New York, is completing arrangements for the erection of proposed plant to have a floor space of 22,000 square feet. Continental dump cars, logging cars and Cuban cane cars are the principal product, and it is proposed to eventually have a plant covering the 13-acre site purchased. All of the machinery will be electrically driven. N. B. Porter will be local manager.

Louisville—Land Improvement.—Arthur L. Macpherson, R. W. Delph and Embrey L. Swearingen have incorporated the Tenant Land Co. with \$17,500 capital stock.

Louisville—Lumber Company.—Incorporated: Superior Lumber Co., with \$12,000 capital stock, by Amos J. Corey, Fred Gernert and others.

Menifee County—Timber Land.—It is reported that an Ontario (Canada) lumber company has purchased from N. H. Trimble of Mt. Sterling, Ky., 2600 acres of oak timber in Menifee county which will be developed.

Paducah—Tin and Copper Shop.—Illinois Central Railroad Co. will erect brick building 60x75 feet, 22-feet side elevation, trussed roof, 29 windows 4x10 feet, for use as tin and copper shop in rebuilding engines. About \$6000 will be expended in building and fixtures; E. A. Egan, Louisville, Ky., engineer in charge, and F. T. Bacon, Chicago, Ill., architect.

Stanton—Coal and Clay Mining, Oil and Gas Wells.—Elkatawa Fuel Co., reported incorporated last week with \$60,000 capital stock, will mine coal and clay and drill for oil and gas on 5000 acres of land near Stanton. It is also proposed to manufacture the clay into fire-brick either at the mines or in Lexington, Ky., where the principal office is located. C. F. Brower of Lexington, Ky., is president; J. C. Patrick of Stanton, Ky., vice-president, and Frank G. Ott of Lexington, Ky., secretary-treasurer.

LOUISIANA.

Ashland—Planting and Manufacturing.—Ashland Planting & Manufacturing Co., Ltd., has been incorporated with \$450,000 capital stock. J. N. Caillouet is president; J. L. Caillouet, vice-president; J. F. Chauvin, secretary, and John Janvier, treasurer.

Baton Rouge—Water-works.—City is considering the purchase of plant of the Baton Rouge Water-Works Co. O'Neill Engineering Co., Dallas, Texas, was mentioned in April as preparing plans and specifications for a \$25,000 plant.

Donaldsonville—Canal Construction.—Plans are on foot for the construction of an inter-coastal canal between Donaldsonville, La., and Brownsville, Texas. C. S. E. Holland of Victoria, Texas; G. J. Palmer of Houston, Texas; John G. Willacy, Corpus Christi, Texas; C. A. Summers, Cuero, Texas; Hugh Jackson, Beaumont, Texas, and C. R. Kitchell, Galveston, Texas, are promoting the enterprise. It is stated the canal will be nine feet deep and cost between \$4,000,000 and \$5,000,000.

Kentwood—Water-works.—Of the \$35,000 bond issue recently reported voted for public improvements, it is stated \$25,000 will be used in the construction of water-works; J. P. Chambers, mayor.

Lake Charles—Street paving.—Joseph Pringle & Son, Kansas City, Mo., it is reported, have contract at \$69,276 for paving Ryan street.

New Orleans—Electric-light and Power Plant.—New Orleans & Baton Rouge Railroad Co., recently organized with \$2,500,000 capital stock to build electric railway, will also establish electric-light and power plant; W. Osgood Orton, C. S. Young, Edward Godchaux and others, incorporators.

New Orleans—Rice Mill.—Bloom & Son are reported as arranging for the erection of rice mill to have a capacity of 900 barrels in 12 hours; electricity to be used as motive power.

New Orleans—Levee Work.—Contract for raising and enlarging the east bank of the London-avenue canal and closing the gap in the levee along the lake shore of Peoples avenue in the third district has been awarded to Benjamin W. Born of Algiers, La., at 29½ cents per cubic yard of earthwork and \$49.50 per 1000 board feet for furnishing and placing the required pine lumber.

New Orleans—Naval Stores.—Texas Naval Stores Co. has been organized with W. B. Gillican, president; M. L. Currie, vice-president, and E. Wood, secretary-treasurer.

New Orleans—Turpentine Distilling.—Hillsdale Turpentine Co., Ltd., has been chartered with \$500,000 capital stock. W. B. Gillican is president; C. E. Redman, vice-president, and E. Wood, secretary-treasurer.

New Orleans—Feed Mill, etc.—Nutriline Feed & Oil Co. has been incorporated with \$200,000 capital stock to take over and operate plant of the Lawrence Feed Co., Ltd., of Crowley, La. The company is interested in the manufacture of feed and rice bran and the extraction of oil therefrom. A warehouse 100x75 feet of steel construction and three tanks of 75,000 gallons capacity will be erected; R. E. De Buys, Hibernia Building, architect. Abe Brittin is president; F. M. Pratt, vice-president; A. Eustis, secretary-treasurer; office, 215 Hibernia Building.

New Orleans—Levee Work.—Lillian & Clark have contract at 18.25 cents per cubic yard for construction of Sycamore levee in Condein parish, approximating 300,000 cubic yards of earth.

New Orleans—Amusement Resort.—White City Amusement Co., Ltd., is the title of company previously reported to be organized with \$100,000 capital stock for establishment of amusement resort on seven and one-half acres of land. Frame buildings 80x130 to 100x200 feet will be erected, and about \$80,000 invested; Mackenzie & Goldstein, architects.

W. G. Tebault is president; T. J. Cannon, third vice-president and general manager; John P. Sullivan, secretary, and J. L. O'meara, treasurer; office, 701 Hibernia Bank Building.*

New Orleans—Land Improvement.—Incorporated: Black Land Co., with \$5000 capital stock. J. L. Black is president; M. R. Lair, vice-president, and J. R. French, secretary.

New Orleans—Levee Work.—Contract has been let for 150,000 cubic yards of earthwork on the new Jack Strange levee in St. John's parish, and arrangements will be made at once for the enlargement of the La Reussette Alliance levee, involving about 70,000 cubic yards of earthwork. Mike Cullen is the contractor.

New Orleans—Metal-bed Factory, etc.—Orleans Metal Bed Co., Ltd., mentioned recently as incorporated, will manufacture metal bedsteads, spring beds and mattresses. One building 80x300 feet, one 50x150 feet and one 40x60 feet will be erected; steel frame and sides. J. M. Sherrouse is president; Wm. D. Dow, vice-president and general manager.*

Opelousas—Water-works and Electric-Light Plant.—City is considering extending water-works and electric-light system. Address The Mayor.

Raceland—Ice Plant.—Gus L. Klein and associates contemplate erecting a 5-ton and 10-ton ice plant.*

MARYLAND.

Baltimore—Printing and Engraving Plant.—Sanders & Johnston Company, 318 North Holliday street, has been incorporated with capital stock of \$10,000 to conduct a printing and engraving plant by Henry S. Sanders, Frank A. Johnston, S. H. O'Neill, Frank Weems and William Wessel.

Baltimore—Telephone Exchange.—The Chesapeake & Potomac Telephone Co., Light near Baltimore street, has awarded contract to Morrow Bros., 212 Clay street, for the construction of an additional story on two-story telephone exchange building, 25x64 feet, at 1611 West Baltimore street, to cost about \$5000; Joseph Evans Sperry, architect, Calvert Building, Fayette and St. Paul streets.

Baltimore—Neckwear Factory.—The Crown Neckwear Co., 115 North Eutaw street, has increased its capital stock from \$5000 to \$15,000.

Baltimore—Automobiles.—Chesapeake Motor Car & Boat Co. has been incorporated with capital stock of \$25,000 to deal in motor car and boats by Dr. F. G. Taylor, Dr. Compton Riely, 4 West 20th street; H. E. Riely, A. A. Torreella and T. Reginald Wise.

Baltimore—Real Estate.—T. F. Hare Company has been incorporated with capital stock of \$10,000 to deal in real estate by Tilden F. Hare, Lucy J. Hare, Wm. E. McCordell, 402 Oxford avenue; Thomas R. Bond, 102 East Lexington street, and Daniel B. Chambers.

Baltimore—Wire Works.—Enterprise Wire and Iron Works, 328 North Gay street, has been incorporated with capital stock of \$25,000 by John F. Deal, Sr., George W. Deal, John F. Deal, Jr., Wm. E. Pack and Charles J. Wittler.

Baltimore—Wheel Factory.—It is reported that W. P. Hollingsworth of the J. C. Hollingsworth Wheel Co. of Harford county, Maryland, is negotiating through G. Howard White & Co., real-estate brokers, 1129 Calvert Building, Fayette and St. Paul streets, Baltimore, Md., for a site for locating his plant in Baltimore.

Baltimore—Refrigerating Plant and Warehouse.—Wagner Bros., wholesale dealers in provisions, 109-117 West Camden street, have purchased lot at 316 and 318 South Eutaw street and they will erect refrigerating plant and warehouse on the site, which is 32x80 feet. The plans for the building have been prepared by W. L. Minor, architect, 20 Clay street, and provide for a two-story building of mill construction.

Baltimore—Machine Shop.—Charles Zies, engineer and machinist, 314-318 South Fremont street, will erect new building at his present location; three stories, 56x60 feet; brick with stone trimmings; steel beams; cast-iron columns; slag roof; galvanized-iron cornice; steam-heating systems; cost about \$6000.

Baltimore—Drug Specialties.—The Morgan Drug Co., 119 North Greene street, has been incorporated with capital stock of \$25,000 to manufacture and deal in drug specialties by Stephen A. Morgan, Thomas W. De Corse, Wilson L. Camden, Harry J. Richards and Nathan Strauss.

Baltimore—Lumber.—The N. W. James Lumber Co., 921 Alceanna street, has been incorporated with capital stock of \$200,000 to acquire timber lands and deal in lumber by Nathaniel W. James, Norman James, George

B. Hunting, Frederick A. Ascherfield and Alexander Campbell.

Erie Mills—Cotton Mill.—Baldwin Manufacturing Co. will install 25 looms in the new weaveroom recently reported as under construction.

Hagerstown—Knitting Mill.—Blue Ridge Knitting Co. has begun the erection of an addition to its plant; present equipment 200 knitting machines.

MISSISSIPPI.

Aberdeen—Cottonseed-oil Mill and Fertilizer Factory.—People's Oil Mill & Fertilizer Co. has been incorporated with \$100,000 capital stock by J. J. Wright, Walter Lann, J. P. Thompson and others. J. J. Wright of Birmingham, Ala., was mentioned last month as to organize company to establish 60-ton cottonseed-oil mill, fertilizer factory, etc.

Arcola—Cottonseed-oil Mill.—J. B. Conley, J. A. Crawford and others have incorporated the Arcola Oil Mills with \$150,000 capital stock.

Biloxi—Road Improvements.—Harrison County Supervisors are reported as considering the issuance of \$100,000 of bonds for construction of shell road 22 miles in length along the beach between Biloxi and Pass Christian, Miss.

Biloxi—Gas Mains.—Gulf Coast Gas Co. is extending mains from Biloxi to Gulfport, Miss., which will be completed by July 15. In the fall it is proposed to extend the mains to Pass Christian, Miss. When completed the company will have 60 miles of mains in the system supplying the Gulf coast between the Bay of St. Louis and the Bay of Biloxi. W. H. Harrison, Jr., is manager.

Brookhaven—Ice Plant.—Brookhaven Ice Manufacturing Co., it is reported, will build an ice plant.

Columbus—Lumber Company.—T. H. Peignes, E. C. Chapman and others have incorporated the Columbus Hardwood Co. with \$50,000 capital stock.

Columbus—Cotton-yarn Mill.—Columbus Underwear Co. will add apparatus for dyeing in the roll, and expects to build a 500-spindle yarn mill and increase its knitting mill; now operating 49 knitting machines, 110 spindles, etc.

Eubank—Lumber Company.—Koons Lumber Co., manufacturers of long-leaf yellow pine lumber, was erroneously reported incorporated under Lucedale, Miss.; capital stock \$30,000.

Friar Point—Publishing.—Enterprise Publishing Co. has been incorporated with \$5000 capital stock by J. H. McClelland, Gerald Fitzgerald and others.

Jackson—Cotton Compress.—It is reported that a company will be organized with \$100,000 capital stock by V. T. Davis and others to establish cotton compress.

Jackson—Woodworking Mill.—Cambey Bros. of McComb City, Miss., it is reported, have purchased site on which to erect a scroll-work mill.

Meridian—Street paving.—Chattanooga (Tenn.) Paving & Construction Co. has contract for paving various streets with vitrified brick.

Meridian—Machine Works.—It is reported that L. C. Aubert of Thibodaux, La., is investigating with a view to locating plant for the manufacture of a sugar-cane harvesting machine which he has invented.

Merrill—Lumber Company.—Chartered: Hillman Lumber Co., with \$50,000 capital stock, by W. H. Rose, James Hillman and others.

Montrose—Saw-mill.—Home Lumber Co., previously reported organized, has purchased and will operate the plant of the Montrose Lumber Co.; daily capacity 25,000' feet pine lumber.

Moss Point—Pecan Culture.—Leroy Perkins of Moss Point, H. S. Snow of Chicago, Ill., and associates have incorporated the Monarch Pecan Co. with \$80,000 capital stock to cultivate pecans.

Natchez—Bridge Construction.—L. M. Dalton has contract for furnishing material and building bridges on 30 miles of the Natchez & Eastern Railroad between Natchez and Columbus, Miss.

Osyka—Saw-mill.—Incorporated: T. C. Ott Company, with \$10,000 capital stock, by T. C. Ott, W. D. Ott and others.

Poplarville—Drug Company.—D. W. Hunnicut, W. L. Arledge, B. Franklin and others have incorporated the Poplarville Drug Co. with \$10,000 capital stock.

Shelby—Spoke Factory.—Southern Spoke & Manufacturing Co. has incorporated with \$10,000 capital stock to establish plant for manufacturing spokes and spoke butts; incorporators, T. J. Poltevant, H. E. Denton and others.

Charlotte—Bridge.—It is reported that the Seaboard Air Line Railway will build an iron and concrete bridge 60 feet wide over North Tryon street, reconstruct and repair the bridge over its road on North Graham street and make other improvements at Charlotte. W. L. Seddon, Portsmouth, Va., is chief engineer.

China Grove—Veneering and Panel Factory.—Gray Veneer & Panel Co. will rebuild plant reported burned last week.*

Vicksburg—Spinning or Knitting Mill.—Moncure Dabney contemplates establishing a plant for manufacturing cotton goods or thread or knit goods. He has erected a two-story building 32x15 feet and is now considering whether to install knitting machines or spindles. Engineer in charge of construction has not been engaged.*

Vicksburg—Steel Bridge.—Supervisors of Warren county have authorized the building of a steel bridge at Hayne's Bluff and replacing old steel bridge from Hayne's Bluff to Byrne Place. It is stated bids will shortly be asked.

Vicksburg—Basket Factory.—G. F. Conant Manufacturing Co. is completing arrangements for the erection of proposed basket factory, to be constructed of concrete blocks.

Yazoo City—Land Improvement.—Park View Realty Co. has been incorporated with \$10,000 capital stock by L. H. Barnwell, Frank B. Hayne and others.

MISSOURI.

Kansas City—Sewerage System.—W. C. Mullins has contract at \$7,942.42 for constructing sewer to drain the territory between 31st street and Armour Boulevard, Locust street and Campbell street.

Kansas City—Cotton Mill.—Kansas City Cotton Mills Co. has permit to erect \$20,000 brick building in connection with its plans, previously mentioned, to establish a cotton mill.

Kansas City—Ramie Fiber Manufacturing.—Incorporated: United States Ramie Fiber & Manufacturing Co., with capital stock of \$100,000, for cultivating and manufacturing ramie and other fibers; incorporators, L. A. Murphy, L. S. Jones, H. A. Mulligan and others.

Kansas City—Fire-department Equipment.—Anderson Coupling & Supply Co., manufacturers of hose and fire-department equipment, has purchased site on which to erect factory building to cost between \$75,000 and \$100,000.

Liberty—Bridge.—Kansas City, St. Joseph & Excelsior Springs Railway Co., Joseph J. Helm, president, Kansas City, Mo., will build a bridge costing \$800,000 for steam and electric cars and vehicles at the foot of Main or Delaware street.

Neosho—Water-works and Sewerage System.—Burns & McDonnell, Kansas City, Mo., it is reported, have been engaged to make plans and estimates for improving water-works and for constructing sewerage system.

St. Louis—Paper-box Factory.—Holman Paper Box Co. is completing arrangements for the erection of proposed addition to paper-box factory; five stories, 53x74 feet; cost \$35,000; William H. Gruen, architect; Neir & Meng, contractors.

St. Louis—Fuel-saving Appliances.—Joseph M. Shortall, Elbert M. Bodine, John P. Grone-meyer and others have incorporated the Missouri Fuel-Saving Co. with \$4000 capital stock to manufacture and install appliances for saving fuel.

St. Louis—Lumber Company.—Incorporated: South Arkansas Lumber Co., with \$10,000 capital stock, by E. C. Neeley, C. A. Bowman and others.

St. Louis—Railway Devices.—St. Louis Frog & Switch Co. has been incorporated with \$5000 capital stock by John J. Lichter, William Jen and W. E. Fisso to manufacture railway frogs, switches, signals and other railway supplies.

NORTH CAROLINA.

Albemarle—Hosiery Mill.—Lillian Knitting Mills Co. contemplates doubling present capacity; now has 56 machines.

Bryson City—Kaolin Mines.—Carolina Clay Co. has been incorporated with \$20,000 capital stock by J. J. McCloskey, E. I. Forest and others of Asheville, N. C.

Burlington—Dyeing and Finishing Plant.—Daisy Hosiery Mills expects to install dyeing and finishing plant; number of knitting machines, 70.

Chapel Hill—Dyeing Plant.—Blanche Knitting Mills Co. contemplates installing a dyeing plant; equipment 51 knitting machines, etc.

Charlotte—Manufacturing.—Chartered: Smith Electric Manufacturing Co., with \$25,000 capital stock, by S. J. Smith, E. F. Creswell and others.

Charlotte—Bridge.—It is reported that the Seaboard Air Line Railway will build an iron and concrete bridge 60 feet wide over North Tryon street, reconstruct and repair the bridge over its road on North Graham street and make other improvements at Charlotte. W. L. Seddon, Portsmouth, Va., is chief engineer.

China Grove—Veneering and Panel Factory.—Gray Veneer & Panel Co. will rebuild plant reported burned last week.*

Creedmoor—Land Improvement.—D. F. Wagstaff, L. V. Pearce and others have incorporated the Creedmoor Land & Improvement Co. with \$50,000 authorized capital stock.

Dallas—Road Improvements.—Propst Construction Co., Charlotte, N. C., has contract for grading 21 miles macadamized road in Gaston county.

Drexel—Dyeing Plant.—Drexel Hosiery Co. expects to install a dyeing plant; equipment 30 machines.

Elon College—Electric-light, Water-works and Steam-heating Plants.—It is reported that Elon College will expend \$15,000 in the installation of electric lights, steam heat and water system in dormitories.

Fort Barnwell—Iron Bridge.—Craven County Commissioners have decided to build an iron bridge across the Neuse river near Fort Barnwell and Maple Cypress. C. E. Foy is chairman.*

Gastonia—Cotton Mill.—Clara Manufacturing Co., previously reported incorporated, etc., with capital stock of \$100,000, has awarded contracts for its 5000-spindle yarn mill. John McAlister has contract to erect main building, 78x268 feet, which will have steam-heating and electric-lighting fixtures. Stuart W. Cramer of Charlotte, N. C., is engineer in charge.

Goldsboro—Saw-mill.—Enterprise Lumber Co. will erect saw-mill with daily capacity of 30,000 feet of pine lumber, replacing plant reported burned last week.

Greensboro—Bobbin Factory.—Sherwood Bobbin & Manufacturing Co., manufacturer of bobbins, skewers, spools, clearer rolls, etc., is installing machinery to increase capacity 60 per cent. for the manufacture of warp and filling bobbins and 20 per cent. for the manufacture of warper spools. All equipment has been purchased. M. S. Sherwood is secretary.

Haw River—Hosiery Mill.—Regina Hosiery Co. will soon add knitting machines; present equipment 10 machines.

Henderson—Tobacco Company.—Chartered: Corbett-Burwell Tobacco Co., with an authorized capital stock of \$25,000, by R. J. Corbett, Spotswood Burwell and others.

Hickory—Hosiery Mill.—Hickory Hosiery Mill Co. contemplates doubling its present equipment of 35 machines and will erect a dyeing plant later; mill not ready to operate before September 1.

Hickory—Wagon Works.—J. H. Coffey Wagon Co. has been incorporated with an authorized capital stock of \$6000 by J. H. Coffey, H. T. Newland and others.

Kernersville—Hosiery Mill.—Victor Hosiery Mills proposes to add 10 knitting machines for fine goods; present equipment 31 machines.

Laurinburg—Water-works and Sewerage System.—All bids received for the construction of water-works and sewerage system on June 7 have been rejected, and new bids will be taken until July 7. F. L. Bundy is mayor.*

Lexington—Knitting Mill.—Yadkin Knitting Mills Co. contemplates installing 30 more machines; present equipment 25 machines.

Lexington—Mirror Works.—Lexington Mirror Co., previously reported incorporated with \$50,000 capital stock, will engage in bevelling and silvering mirrors; annual capacity \$125,000 worth. A one-story building 114x48 feet, iron siding, will be erected. W. H. Walker is president; J. T. Hedrick, vice-president; D. F. Conrad, secretary-treasurer, and Thomas Gallagher, manager.

Marion—Agricultural Implements, Wood-working Plant, etc.—For information regarding the company previously reported to be organized by W. J. Montgomery of Marion and S. A. Lewis of Latta, S. C., for manufacturing agricultural implements, sash, doors and blinds, address Mr. Lewis, and not Mr. Montgomery.*

Mooreboro—Cotton Mill.—Incorporated: Elizabeth Manufacturing Co., with capital stock of \$60,000, for manufacturing cotton goods, by C. M. Cooke, Jr., of Kings Mountain, N. C.; C. C. Blanton of Shelby, N. C.; A. M. Lovelace of Ellenboro, N. C., and others. R. R. Haynes is president, and S. S. Royster, treasurer.

North Wilkesboro—Wilkes Industrial Co. has incorporated with \$20,000 capital stock to promote industrial enterprises; Incorporators, W. F. Trodden, H. O. Abner and R. E. Dance.

Raleigh—Street Paving.—F. W. Hunnicutt has contract for laying 4500 yards of granolithic paving in Capitol square.

Randleman—Street-paving.—Arrangements have been made for grading, curbing and macadamizing the main street, and bids will be opened for same June 23. Address The Mayor.*

Rutherford County—Timber Land.—B. E. Cogbill of Boydton, Va., and associates have purchased 25,000 acres of timber land in Rutherford county, as recently reported. No arrangements have been made as yet for its development.

Selma—Cotton Mill.—M. C. Winston and associates will organize a company to build mill of 10,000 spindles for manufacturing yarns. They will want to contract for machinery on June 14.*

Spring Hope—Lumber Company.—Chartered: Montgomery Lumber Co., with \$250,000 authorized capital stock, by Guy L. Buell of Spring Hope, G. B. Montgomery, H. Ernest Montgomery, George H. Hillis and associates of Buffalo, N. Y.

Valdese—Knitting Mill.—Waldensian Hosiery Mills will increase capacity to 200 dozen daily during the year; present capacity 125 dozen; equipment 45 knitting machines.

Weldon—Steel Bridge.—Halifax & Northampton Bridge Co. has been organized with George E. Ransom, president; Thomas L. Emery, vice-president, and Wm. H. S. Burgwyn, secretary-treasurer, to build a steel bridge over the Roanoke river near Weldon on stone piers now standing. The piers are 40 feet above low water, and the bridge will be elevated seven feet eight inches above the piers on steel girders and columns braced; bridge to have a roadway of 16 feet and capacity of 100 pounds per square foot. The distance between piers is 65 feet, 127 feet 6 inches, 142 feet 6 inches and 131 feet 6 inches, respectively, with approaches 100 and 200 feet of wood piling. Bids will be received by Wm. H. Burgwyn, secretary.

Winston—Drug Company.—Chartered: E. W. O'Hanlon Company, with \$50,000 authorized capital stock, by E. W. O'Hanlon, Robert Critz, Samuel Ireland and others.

SOUTH CAROLINA.

Beaufort—Steel Bridge.—Bids will be opened July 2 for the construction of a steel bridge near Beaufort; W. F. Sanders, supervisor of Beaufort county.*

Berkeley County—Dam Construction.—Charleston (S. C.) Light & Water Co. it is reported, will build a dam across Goose creek.

Columbia—Brick Works.—J. H. Shirley contemplates establishing brick works.

Lancaster—Supplies.—People's Supply Co. has been organized with \$30,000 capital stock. Ernest Moore is president; John A. Cook, secretary-treasurer.

Charleston—Fertilizer Factory, etc.—Planters' Fertilizer & Phosphate Co. has let contract to the N. P. Pratt Laboratory Co., Atlanta, Ga., for the erection of fertilizer factory and sulphuric-acid plant. This company was previously reported incorporated with \$350,000 capital stock to manufacture fertilizers, phosphates, etc. Plant will have a river frontage of 850 feet and cover about 30 acres of ground.

St. George—Cotton Gin.—P. J. Hucks has contract to erect cotton gin for St. George Cotton Oil Co., previously mentioned. Contract for the machinery has also been let.

Westminster—Steel Bridge.—Oconee county is considering the construction of bridge over Little river at Burnt Tanyard; main span steel, 152 feet long, with wooden approaches 57 feet; L. H. V. Holson, county supervisor.*

TENNESSEE.

Chattanooga—Coal and Iron Lands.—It is reported the Chattanooga Company is arranging for the development of 40,000 acres of coal and iron lands which it owns north of the Tennessee river and in the Walden's Ridge belt, and will build a bridge across the Tennessee river in connection with this development. W. G. M. Thomas is general manager.

Chattanooga—Mining Equipment, etc.—Chattanooga Equipment Co. has been incorporated with \$10,000 capital stock by G. W. Nixon, Grant W. Smith and others to manufacture and deal in equipment for manufacturing plants.

Chattanooga—Pump Works.—It is reported that S. W. Luitweller of the Luitweller Pump & Engine Co., Los Angeles, Cal., is investigating site with a view to locating branch plant or removing plant from Los Angeles. The company manufactures pumps of all kinds, including the Luitweller pulseless pump.

Clinton—Stove Foundry.—Trenton Iron Works, manufacturers of cooking and heating stoves and grates, is reported to enlarge plant.

Fayetteville—Phosphate Mines.—Reported that David M. Bright of New York city has discovered large deposits of phosphate rock in Lincoln county, and will probably arrange for development. Mr. Bright can be ad-

dressed for the present at Read House, Chattanooga, Tenn.

Fayetteville—Tobacco Factory.—Fayetteville Tobacco Works has been organized by W. H. Ladd and associates. A building 40x80 feet will be erected. W. H. Ladd was mentioned last week to organize company with \$10,000 capital stock to establish tobacco factory.

Johnson City—Street-paving.—The \$10,000 bond issue previously reported to be voted for street-paving has been defeated. Address The Mayor.

Johnson City—Hosiery Mill.—Unaka Knitting Mills will install machinery for dyeing; present equipment 20 knitting machines.

Knoxville—Laundry.—Bell Laundry Co. has been incorporated by V. S. McClung, Chas. L. Parham, Will S. Hall, W. A. Moore and others to operate laundry. A building is being erected and machinery will shortly be installed.

Lebanon—Bottling Works and Ice Plant.—John Cowan, A. B. Humphreys and D. Y. Conaster have organized the Lebanon Bottling Works & Ice Co. to take over the plant of the Lebanon Bottling Works and erect an ice plant in connection.

Memphis—Land Improvement.—South Memphis Land Co. has increased capital stock from \$300,000 to \$1,000,000.

Memphis—Plate-glass Plant.—It is reported that Blansinger & Co. of Richmond, Va., will engage in the manufacture of mirrors, level plates and ornamental glass in Memphis, occupying a portion of the building previously reported to be erected by J. Rose & Co.

Memphis—Glass Company.—Chartered: George I. Drew Glass Co. has been incorporated with \$10,000 capital stock by H. C. McKellar, Corbin Clayton, K. D. McKellar and others to deal in glass.

Memphis—Farm Implements and Vehicles.—George S. Hooper, Fred W. Hooper, A. Walsh and associates have incorporated the Gale-Cook Company with \$50,000 capital stock.

Memphis—Log Loading.—Incorporated: Memphis Log Loading Co., with \$20,000 capital stock, by W. H. Russel, W. A. Dolph, J. W. Dickison and others.

Memphis—Land Improvement.—Lamp Real Estate Co. has been incorporated with \$125,000 capital stock by S. H. Lamp, W. G. Thomas, Walter Lamb and others.

Memphis—Printing Plant and Mailing System.—Classified Address & Mailing Co. has incorporated with \$10,000 capital stock to establish printing plant and introduce a mailing system. D. C. Harris is president; D. H. Moseley, vice-president, and E. A. P. Clark, secretary-treasurer.

Memphis—Mantel Factory.—The Tennessee Mantel Co. is reported as arranging for the erection of proposed three and four-story brick addition.

Memphis—Land Improvement.—J. M. Baker, F. D. Smythe, M. R. Perkins and others have incorporated a company with \$100,000 capital stock to purchase and improve land.

Nashville—Mattress Factory.—Jamison Manufacturing Co. has been incorporated with \$60,000 capital stock by H. D. Jamison, Robert Dyas, R. H. Dudley, Jr., and others to take over the mattress factory of R. D. Jamison in North Nashville and the mattress factory of Robert Dyas in Decatur, Ala.

Nashville—Land Improvement.—Belle Forest Land Co. has been incorporated with \$25,000 capital stock by J. E. Thompson, John R. Aust, C. A. Moore and others.

Nashville—Handle Factory.—Palmetto Manufacturing Co. reported incorporated in April with \$25,000 capital stock to manufacture axe, hoe and broom handles, has completed organization with W. H. Cooper, president; Wm. Lowndes, vice-president, and W. H. Hicklin, general manager and secretary. A brick building has been secured and the plant will shortly be in operation.

Nashville—Buggy Factory.—De Ford Buggy Co. will add a body-making plant to its buggy factory, and a three-story building will be erected for this purpose.

Nashville—Abattoir.—Neuhoff Abattoir & Packing Co., previously reported as to build abattoir, will begin at once the erection of buildings; main building to be 75x96 feet and power-house 48x96 feet; cost \$25,000.

Niota—Hosiery Mill.—Crescent Hosiery Mills has begun the erection of an addition 60x64 feet; present equipment 36 knitters, etc.

Pittsburg—Hosiery Mill.—Aycock Hosiery Mills of Paducah, Ky., will remove to South Pittsburg and there make extensive improvements.

Winchester—Printing Plant.—Jesse M. Littleton, J. C. Hale and others are organizing company with \$25,000 capital stock to establish printing and publishing plant.

TEXAS.

Abilene—Cement-stone Factory.—Seth Kirk, Hugh Emerson and John W. Barnett have incorporated the Abilene Cement Stone Co. with \$10,000 capital stock.

Beaumont—Firearms Works.—Incorporated: Nichols Manufacturing Co., with \$20,000 capital stock, by C. M. Nichols, L. J. Kopke, John Fitzgibbons and others, to manufacture guns and other firearms.

Bolton—Water-works, etc.—City is reported as arranging for the purchase of local water-works plant, including natatorium. Address The Mayor.

Bryan—Acetylene-gas Plant.—C. M. Camp, it is reported, has franchise to establish acetylene-gas plant.

Bryan—Electric-light and Power Plant.—It is reported that Fritz Braatz has franchise to establish electric-light and power plant.

Cooper—Telephone System.—Incorporated: Delta Telephone Co., with \$15,000 capital stock, by C. H. Reid, R. M. Connell and others.

Dallas—Street Improvements.—City is considering laying 42,673 square yards of bituminous paving on Ervay street, 3324 square yards vitrified brick on Live Oak street, 6434 square yards asphalt on Elm street and 3833 square yards bituminous on Swiss avenue. E. L. Dalton is city engineer.

Fort Worth—Coal Mines.—L. L. Hawes, W. C. Guffey and others have incorporated the Hawes Coal Co. with \$5000 capital stock.

Frisco—Corn and Chop Mill and Elevator.—Frisco Grain & Elevator Co., reported incorporated last month with \$10,000 capital stock, will operate corn and chop mills and elevator. A four-story building, 30x40 feet, will be erected. About \$8000 will be invested; Early Price, architect.*

Gordon—Cotton Gin.—Farmers' Gin & Mill Co., recently reported incorporated with \$8000 capital stock, will operate cotton gin with a daily capacity of 30 bales. A building 32x72 feet will be erected.

Gordon—Coal Mines.—W. W. Johnson of Strawn, Texas, it is reported, is arranging to reopen the Coalville mines near Gordon.

Hillsboro—Coal Mines.—Bear Grass Coal Co. has been incorporated with \$20,000 capital stock by A. J. Jasper, S. C. Dyar and others.

Houston—Oil Wells.—Chartered: Christian Oil Co., with \$50,000 capital stock, by E. G. Christian, George W. Armstrong and R. L. Autrey.

Houston—Saw-mill.—W. H. Borders, J. C. Abernathy, D. Peacock and others have incorporated the Houston Saw-Mill Co. with \$15,000 capital stock.

Houston—Coffee Roasting and Blending Plant.—American Coffee Co. is the title of company reported organized last week with E. E. Pye, president; H. S. Fox, Jr., vice-president, and Ira Tisdale, secretary-treasurer, to take over the coffee roasting and blending plant of the Rosenberg Bros. Coffee Co.; capital stock \$30,000.

North Fort Worth (P. O. Fort Worth)—Laundry.—Chartered: Palace Laundry Co., with \$10,000 capital stock, by W. D. Davis, O. R. Sanders and W. H. Abernathy.

Pelican—Saw and Planing Mill.—J. S. Johnson is reported as to erect a saw and planing mill.

Pittsburg—Lumber.—R. B. Pollack, L. C. Malone and others have incorporated the Patterson-Miller Lumber Co. with \$50,000 capital stock.

Port Lavaca—Summer Resort.—A syndicate headed by J. M. Turner, 204 South Clark street, Chicago, Ill., has purchased 4000 acres of land situated at the junction of Lavaca and Matagorda bays, three and one-half miles from Port Lavaca, which will be developed as a summer resort and a townsite laid out. Hotels and sanitarium will be built and a driveway constructed 100 feet wide.

San Antonio—Construction Company.—Builders' Construction Co. has been incorporated with \$10,000 capital stock by R. O. Langworthy, W. E. Warman and George E. Cutler.

Sherman—Cotton Mill.—Reports state that the Sherman Cotton Mills will increase capacity 25 per cent.; present equipment 8000 spindles and 160 looms.

Sherman—Cotton Mill.—It is reported the Sherman Cotton Mills Co. will increase its capacity in connection with an issuance of bonds to the amount of \$125,000.

Somerville—Fuller's-earth Mine.—It is stated that deposits of fuller's earth have been discovered on the property of the Somerville Development Co., N. W. Dunham, manager, and surveys are being made preparatory to the establishment of plant with a daily capacity of 200 tons for preparing the same for market.

Sour Lake—Dry-kilns.—Frisco Lumber Co., it is reported, has begun the installation of dry-kilns to have a capacity of 30,000 feet every 72 hours.

Taylor—Sewerage System.—The construction of sewerage system is being considered, and plans, maps, drawings and detailed specifications of a system proposed by William Brush of Austin, Texas, have been submitted. J. A. Thompson has been elected chairman of committee.

Texas City—Dry-docks, etc.—W. B. Patton of Duluth, Minn., has been engaged to prepare plans for docks previously reported to be built by A. P. Clark and associates of Galveston, Texas; to be 600x90 feet, 20-foot over-sill. About \$350,000 was mentioned recently to be expended in the building of docks, machine shops and installing equipment.

Van Alstyne—Elevator Company.—E. A. Turner of Van Alstyne, J. W. Webb, Ben Hill, J. P. Crouch, all of McKinney, Texas, and others have incorporated the Van Alstyne Elevator Co. with \$30,000 capital stock.

Waco—Steel Bridge.—It is reported that the St. Louis Southwestern Railway will replace present bridge across the Brazos river with a steel structure. M. L. Lynch, Tyler, is chief engineer.

Waxahachie—Cotton Mill.—Waxahachie Cotton Mills will award contract during the week for erection of additional building in connection with the enlargement, previously referred to, of its plant. The new machinery will comprise 5000 spindles and 50 looms; present equipment 5000 spindles and 150 looms; John Hill of Atlanta, Ga., engineer in charge.

Weatherford—Gas Plant.—Federal Gas Co. has secured franchise to erect gas plant.

Wharton—Cotton Gin.—Independent Gin Co. has been incorporated with \$10,000 capital stock by R. H. Sorrell, G. A. Harrison, H. J. Bolton and others.

Whitesboro—Water-works.—Arrangements are being completed for the construction of proposed water-works, and bids will be received until June 21; John Marshall, mayor.*

VIRGINIA.

Ashland—Water, Sewerage and Gas Plants.—J. D. Harris is engineer in charge of construction of water, sewerage and gas plants to be built and operated by a company being organized in Philadelphia, Pa., under the auspices of Houston & Co., bankers, of that city.

Berkley—Pipe Foundry.—Glamorgan Pipe & Foundry Co. is completing arrangements for the erection of its proposed plant, the buildings of which are to cover 12 acres of ground. About \$400,000 reported as to be expended; main office, Lynchburg, Va.

Big Stone Gap—Oil Wells.—Chartered: Virgin Oil Corporation, with G. E. Taylor, president; William B. Taylor, secretary-treasurer; authorized capital stock \$500.

Blackstone—Sewerage, Water-works and Lighting Plant.—Town is considering the installation of a complete system of sewerage, water-mains and lighting equipment. Address Town Clerk.

Buena Vista—Publishing and Printing Plant.—Frank C. Hoerle, 215 Franklin street, Johnstown, Pa., will establish newspaper and printing plant.

Lexington—Electric-light-plant Improvements.—Lexington Light & Power Co., Robert E. Hutton, general manager, is arranging for improvements to electric-light plant, installing new machinery and equipment, including 4000-light machine and 250-horse-power turbine. Contracts have been let.

Lynchburg—Cigarette Machines.—United Cigarette Machine Co., Ltd., has begun the erection of proposed plant for the manufacture of cigarette machines and repair parts for same; three stories, 50x250 feet; brick and stone; mill construction; cost \$80,000; Lewis & Burnham, architects, and B. E. Williams, engineer in charge. James W. Gerow is chairman.

Lynchburg—Street Improvements.—City has completed arrangements for paving various streets, and bids for the work will be received until June 18; H. L. Schaner, city engineer.*

Marion—Lumber Company.—Chartered: Pennland Lumber Co., with W. S. Burger of Marion, president and general manager; C. W. Amsler of Clarion, Pa., vice-president; E. M. Campbell, secretary, and J. C. Campbell, treasurer, both of Marion.

Norfolk—Concrete-block Factory, etc.—Norfolk Cement Products Co. has been organized with an authorized capital stock of \$5000 to manufacture concrete building blocks, cement, sand, brick, etc. C. C. Cobb is president; J. Leonard Wood, vice-president, both of Norfolk; W. E. S. Vaughan, secretary-

treasurer, and S. B. Cash, general manager, both of Newport News, Va.

Norfolk—Land Improvement.—Chartered: River Shore Corporation, with \$25,000 capital stock. Elias Peyer is president; William Garner of Newport News, Va., vice-president, and Benjamin Lowenberg, secretary-treasurer.

Norfolk—Feed-milling Plant.—Reports state that E. P. Mueller of Milwaukee, Wis., is investigating sites at Norfolk and Portsmouth, Va., for the location of a \$200,000 feed-milling plant. The feed manufactured is made of the by-products of grain with a mixture of molasses.

Norfolk—Suspender Factory.—Governor Adjustable Suspender Co. has been incorporated with an authorized capital stock of \$5000. Henry Decker is president; Harold V. Price, vice-president.

Norfolk—Tobacco Factory.—Ware-Kramer Tobacco Co. has been incorporated with an authorized capital stock of \$300,000. F. D. Ware is president. This is an established enterprise previously mentioned in this department.

Norfolk—Drug Factory.—Botanic Medicine Co. has been incorporated with \$20,000 capital stock to continue an established business.

Norfolk—Grain Elevators.—It is reported that the Norfolk & Western Railroad Co. will erect a grain elevator on a portion of the property recently reported purchased at Lambert's Point, adjoining its piers. C. S. Churchill, Roanoke, Va., is chief engineer.

Norfolk—Manufacturing.—Incorporated: Atlantic Manufacturing Co., with A. M. Agelasto, president; M. A. Agelasto, vice-president and general manager; C. P. Twiford, secretary, and P. A. Agelasto, treasurer.

Petersburg—Timber Land.—River Timber Corporation has been chartered with an authorized capital stock of \$60,000. William H. Mann of Nottoway, Va., is president; George H. Cradle of Blackstone, Va., secretary and general manager, and C. E. Wilson of Crewe, Va., treasurer.

Pulaski—Water-power Plant.—City is considering the issuance of \$50,000 of bonds for the erection of water-power plant to generate electricity for lighting and power purposes. Address The Mayor.

Raven—Coal Mines.—Raven Collieries Co. reported incorporated last week under Tazewell, Va., with \$40,000 capital stock, has leased 500 acres of coal property and mining equipment formerly operated by the Coal Creek Coal Co.; daily capacity 200 tons. About January 1, 1907, the company will consider improvements to plant in the way of electric-haulage and electric-mining machinery. J. N. Harman of Tazewell, Va., is president; H. J. Burnett, vice-president and superintendent, and J. N. Harman, Jr., secretary-treasurer, both of Raven.

Richmond—Vinegar Works.—Kirk-Shelly Vinegar Co. has been incorporated with an authorized capital stock of \$25,000. E. B. Kirk is president; E. S. Shelly, vice-president, and R. F. Cox, secretary-treasurer.

Richmond—Warehouse System.—W. B. West, John A. Robinson and associates are reported as arranging for a general bonded-warehouse business, and have acquired most of the land necessary for the erection of storage warehouses, power, lighting, ice and other plants for the exclusive use of the warehouse system. It is stated that about \$1,000,000 will be invested in the enterprise.

Richmond—Land Improvement.—Incorporated: Bellevue Park Co., with an authorized capital stock of \$50,000; Sol Rosenbaum of New York city, vice-president; R. H. Meade, secretary-treasurer, and Horace L. Smith, general manager, both of Richmond, Va.

Richmond—Locomotive Works.—American Locomotive Co., which has begun improvements (as previously mentioned) at its plant, increasing the present capacity, will erect power plant, addition to plant for the construction of tanks and the manufacture of steam shovels, etc. The extension of 160 feet to boiler shop, previously referred to, will shortly be completed. It is estimated that about \$40,000 will be expended; H. A. Gillis, superintendent.

Richmond—Phosphate and Chemical Works.—United Phosphate & Chemical Co. has been incorporated with Coleman Wortham, president; E. O. McCabe, vice-president, and Geo. W. Warren, secretary-treasurer; capital stock \$100,000.

Suffolk—Lumber Company.—Warwick Lumber Co. has been incorporated with an authorized capital stock of \$50,000. George L. Barton of Suffolk is president; Edward R. Roberts of Roduoco, N. C., secretary-treasurer.

Virginia Beach—Amusement Resort.—Princess Anne Investment Co., of which C. A.

Neff is president; Dr. Emerson Lankford, vice-president, and Charles McIntosh Tunstall, secretary-treasurer, all of Norfolk, Va., has purchased the Princess Anne Hotel, which will be improved by a 100-room addition. Will also establish amusement enterprises and make other improvements at the beach at a cost of \$500,000.

Whaleyville—Timber Development.—Jefferson Development Corporation, recently organized with an authorized capital stock of \$25,000, will develop a tract of 1844 acres of timber land reported purchased last month by J. M. Wolford, 108 Plum street, Norfolk, Va. A mill has been purchased from A. Weaver of Eure, N. C., which will be removed to Whaleyville and operated; output 12,000 feet of timber daily and 30,000 laths. It is proposed to install another mill in November with a capacity of 25,000 to 30,000 feet daily. W. L. Davis is president; A. Weaver of Eure, N. C., vice-president; J. M. Wolford, 108 Plum street, Norfolk, Va., manager, and W. J. Shepherd, treasurer.

WEST VIRGINIA.

Berwind—Mining Town.—It is reported that the New River & Pocahontas Consolidated Coal & Coke Co. (which is controlled by the Berwind-White Coal Co. of Philadelphia, Pa.) will build a mining town near Berwind in connection with the development of its various coal properties, which include 35,000 acres of coal land on the Bellington branch of the Pennsylvania Railroad. The company is said to have set apart 200 acres, which are being laid out into lots, and 200 houses will be built this summer and 200 next summer.

Burning Springs—Coal Mines.—Miners' Coal Co. has been organized with \$100,000 capital stock by J. H. Shrewsbury, Charles B. Daum, William B. Stevens, Howard Donnelly, all of Charleston, W. Va., and H. Lyon Smith of Washington, D. C.

Charleston—Land Improvement.—Chartered: Laurel Creek Land Co., with authorized capital stock of \$200,000, by William Beury, Harry C. Beury, Joseph E. Beury and associates.

Clarksburg—Oil and Gas Wells.—Nicholas Oil & Gas Co. has been incorporated with an authorized capital stock of \$50,000 by Lyda S. Horner, D. P. Potter, W. F. Alexander, Osman E. Swartz and others.

Elkins—Lumber Plant.—McDevitt & Tate of Bellefonte, Ohio, it is reported, have begun the erection of a lumber plant at Punkintown near Elkins.

Elkins—Refrigerator Factory.—Elkins Refrigerator & Fixture Co. is being organized for the manufacture of sectional refrigerators and cold-storage houses, as well as stationary refrigerators of all kinds, butchers', grocers' and other store fixtures. It is proposed to erect one-story building 112x50 feet. About \$25,000 will be expended in building and equipment. Power will be obtained from Elkins Pail & Lumber Co., from which plant the building material will also be secured. Wm. M. McBride, care Elkins Pail & Lumber Co., is architect, and will be superintendent of factory. (This enterprise recently referred to.)*

Elm Grove—Paving and Sewerage.—City will vote June 21 on the issuance of \$15,500 of bonds for paving the National Pike and \$3500 for sewer purposes. Address Mayor Steon.

Fairmont—Coal Mines.—It is reported that the Fairmont Coal Co. is installing new machinery at its mines, including 20 electrical locomotives for inside haulage. Power for operating same will be obtained from the Fairmont & Clarksburg Tractor Co.

Gill—Lumber Plant.—McKean Lumber Co. has been incorporated with an authorized capital stock of \$20,000 by E. C. Tanner of Bradford, Pa.; E. R. Berry of Ridgeway, Pa.; J. C. Steele of Farmer's Valley, Pa., and associates.

Kanawha Station—Oil and Gas Wells.—George C. W. Crawford, Louis S. Hubbard, George E. Relyea, all of New York city; Frank Stark Taggart, London, England, and associates have incorporated the Oil & Gas Company of North America with an authorized capital stock of \$500,000 to acquire the Henderson farm and explore for oil and gas.

Keyser—Natural-gas Mains.—West Virginia Central Gas Co. (main office, Buffalo, N. Y.) has secured franchise to furnish the city with natural gas.

Martinton—Street Improvements and Sewerage System.—City will vote July 1 on the issuance of \$10,000 of bonds for street improvements and \$5000 for sewer system. T. S. McNeil is mayor.

Martinsburg—Water-power-Electrical Plant.—Martinsburg Power Co. is reported as completing arrangements for the development of the water-power of the Potomac river and the

construction of proposed power plant on the West Virginia bank of the river at Dam No. 4, developing about 2000 horse-power. Contract for excavations and preparing for erection of power plant has been let to Schoff & Brubaker, Lancaster, Pa.; contract for hydraulic machinery has been awarded to B. F. Groff of Lancaster, Pa., and for electrical work to Warren Electrical Manufacturing Co. of Sandusky, Ohio. Contract for pole line, about 15 miles long, to cost \$15,000, has not been awarded. It is also proposed to increase the power plant at Dam 5 by installation of additional turbine wheels to cost \$800. The additional power obtained for this development will give the company an aggregate of 3000 horse-power, to be transmitted by electricity for lighting and power purposes. It is stated that about \$135,000 will be expended. Dr. S. N. Myers is president of the company.

Milton—Drilling Company.—Milton Drilling Co., reported incorporated recently with \$10,000 capital stock, will contract for drilling oil and gas wells, laying pipe lines and all kinds of contract work in the oil field. The company is now developing a productive oil and gas field in Cabell county. I. J. Harshberger is president, and T. Penwell, general manager.

Morgantown—Bridges.—Monongalia county will vote June 23 on an \$85,000 bond issue for constructing bridges. Bond issue was previously reported to be voted May 12. Address County Clerk.

New Martinsville—Reservoir, etc.—City is reported as to arrange for the construction of reservoir to cost about \$10,000 and install new gas engine at the pumping station. Address The Mayor.

Oceana—Publishing.—Wyoming Tribune Co. has been incorporated with an authorized capital stock of \$5000.

Parkersburg—Oil Wells.—Chartered: Cherry Oil Co., with an authorized capital stock of \$16,000, by M. McNease, E. C. Rector, James S. Wade and others.

Parkersburg—Oil-well Contractors.—Merceda Drilling Co. has been incorporated with \$10,000 capital stock. E. A. Mead is president.

Princeton—Bottling and Ice Works.—Chartered: Princeton Bottling and Ice Works, with \$10,000 capital stock, by E. W. Haile, L. H. Perkins, H. W. Straley and others.

Sistersville—Water-works Improvement.—Water-Works Committee will arrange at once for the purchase and installation of steam pump at the water-works.

Wheeling—Tin-can Factory.—It is reported that W. T. Graham, president of the American Can Co., New York city, is investigating with a view to locating plant.

Wellsville—Oil Wells.—Incorporated: Oriental Oil Co., with an authorized capital stock of \$25,000, by W. R. Miller, Joseph Leslie, John C. Palmer, Jr., and others.

Wheeling—Crematory.—Arrangements are being made for the construction of crematory, and bids for same will shortly be asked by City Engineer Cooke. It is estimated that about \$25,000 will be required for its construction.

INDIAN TERRITORY.

Mounds—Grain Elevator.—R. H. Drennan Grain Co. of Oklahoma City, O. T., it is reported, has begun the erection of proposed \$900-hundred grain elevator.

Tishomingo—Water-power-Electrical Plant.—Pennington Power Co. is developing the water-power of the Pennington and Blue rivers, for which H. von Schon, Detroit, Mich., was mentioned last week as making surveys. The amount of power to be obtained for transmission by electricity cannot be accurately stated at present. W. C. Wells is president; C. B. Burrows, treasurer, and Stephen C. Treadwell, secretary.

Tulsa—Rolling Mill.—Charles H. Rife is organizing company to build a rolling mill to use scrap for new material and natural gas for fuel. It is proposed to build a 20-inch mill and 9 inch Belgian finishing mill.*

OKLAHOMA TERRITORY.

Carmen—Electric-light and Power Plant.—J. F. Mott, S. A. Mott and others have incorporated the Carmen Electric Light & Power Co. with \$12,000 capital stock.

Clinton—Cottonseed-oil Mill.—Western Oklahoma Cotton Oil Co. has let contract to the Gross Construction Co., Oklahoma City, O. T., for erection of proposed oil mill. The plant when completed will represent an investment of \$75,000.

Fairview—Ice Plant.—H. Clay Miller, D. R. Thomas and others have incorporated the Fairview Ice & Development Co. with \$10,000 capital stock.

Headrick—Threshing Company.—Lee Curry, J. O. Coleman and D. B. Earbro have incorporated the Headrick Threshing Co. with \$3000 capital stock.

Lawton—Mill and Elevator.—F. M. English, E. S. Arthur and John Bednar have incorporated the Lawton Mill & Elevator Co. with \$50,000 capital stock.

Lawton—Ore Smelting Plant.—It is reported that J. C. Thomas & Co. of New York city, who recently acquired the property of the Big Four Mining Co. in the Wichita mountains, will shortly begin the construction of an ore smelting plant to cost \$40,000.

Norman—Laundry and Boiler-house.—Oklahoma Sanitarium Co., A. T. Clark, superintendent, will rebuild laundry and boiler-house recently reported burned: laundry to be 10x50 feet and boiler-house 20x30 feet.

Oklahoma City—Oil Refinery.—Oklahoma Refining Co., reported incorporated last week with \$50,000 capital stock, will erect refinery of 750 barrels daily capacity; Geo. A. Todd, architect; James L. Donahoe, engineer in charge. Kee R. McKee is secretary-treasurer; office, Room 308, Baltimore Building.*

Oklahoma City—Land Improvement.—Chartered: Central Realty Co., with \$50,000 capital stock, by W. E. Campbell, Frank Fish and T. H. Enderlein.

Rossville—Telephone System.—Chartered: Farmers' Mutual Telephone Co., with \$2000 capital stock, by W. G. Hale, T. A. Ward and others.

Snyder—Cotton Compress and Oil Mill.—Snyder Compress and Oil Mill is the title of company reported organized last week with H. A. Sully, president; B. O. Burnett, vice-president; H. S. McCowan, secretary, and J. V. McClintic, treasurer, to operate cotton compress and cottonseed-oil mill; capital stock \$150,000.

Spencer—Telephone System.—Spencer Mutual Telephone Co. has been incorporated with \$3000 capital stock by C. C. Kramer, W. L. White and others.

BURNED.

Asheville, N. C.—Burnette & Lasater's carriage factory.—C. I. Bard's building.

Baton Rouge, La.—State Capitol Building damaged \$60,000. N. C. Blanchard is governor.

Hopkinsville, Ky.—Mrs. Mary L. Minty's warehouse; loss \$10,000.

Huntington, W. Va.—West Virginia Brewing Co.'s plant; loss \$250,000.

Trout, La.—Trout Lumber Co.'s plant; loss \$50,000.

Waukegan, Ill.—Palace Hotel. Mrs. J. M. Wallace, proprietor; loss \$50,000.

BUILDING NOTES.

* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

Alexandria, La.—College Buildings.—Building committee of Baptist State College, Rev. D. F. Lawrence, chairman, has rejected all bids for the erection of proposed college buildings.

Americus, Ga.—Dwelling.—Frank Lanier will erect a colonial residence.*

Anderson, S. C.—Cotton Warehouse.—Bids will be received until June 30 for erection of a standard cotton warehouse of three compartments for Farmers' Union Warehouse Co.; two stories; brick with gravel roof. Automatic sprinklers will be installed, and steel water tank and tower. Plans and specifications may be seen at office of C. G. Syre, architect and engineer, People's Bank Building; U. E. Seybt, chairman building committee.

Atlanta, Ga.—Amusement Buildings.—Jns. K. Glass has contract to erect buildings at the amusement park for Wonderland Amusement Co., to include theater, figure eight, chute-the-chute and midway attractions; buildings to be of mill construction; electric lights. Power plant will be equipped with 5000 four-candle-power lights and 150 horsepower motors. About \$100,000 to be invested.*

Atlanta, Ga.—Store Building.—James W. English will erect \$50,000 store building after plans by Morgan & Dillon. Miles & Bradt Company will have charge of the construction.

Baltimore, Md.—Dwelling.—Robert C. Hale, 406 Piper Building, Hanover and Baltimore streets, will erect 2½-story frame dwelling at Roland Park. Electric wiring and fixtures, sanitary plumbing and heating system will be installed. Gladfelter & Chambers, 2972 Woodberry avenue; A. F. West, 217 South Gilmer street; Roland Park Company,

Roland Park, and John Cowan, 106 West Madison street, are estimating on construction; bids to be in June 15; Wyatt & Nolting, architects. Builders' Exchange Building, 2 East Lexington street.

Baltimore, Md.—Office Building.—The International Trust Co., 25 East Baltimore street, has awarded contract to the Engineering Contracting Company, 309 North Calvert street, for the construction of an office building at 4 Light street, and connected in the rear to its main building; three stories, 20x28.7 feet; marble exterior; steel-frame construction fireproofed with concrete; terra-cotta partitions; fireproof doors; slag roof; plumbing, heating system and electric wiring and fixtures not included in contract; cost about \$14,000; Parker & Thomas, architects, Union Trust Building, Charles and Fayette streets.

Baltimore, Md.—Dwellings.—German & Co., builders, 202 Law Building, Courtland near Lexington street, will erect 20 two-story brick dwellings on Park Heights avenue, to cost about \$50,000; Jacob F. Gerwig, architect, Hoffman Building, 11 East Lexington street.

Baltimore, Md.—Dwellings.—John F. Carter, builder, Park Heights avenue, has purchased four acres of land on Wilton Heights and will erect about 25 dwellings on the site, to cost about \$500 each.

Baltimore, Md.—Dwellings.—Daniel Donnelly, 2323 East Hoffman street, has awarded contract to James Coulling, builder, 1824 East Madison street, for the construction of eight two-story brick dwellings on Collington avenue near Hoffman street, to cost about \$10,000.

Baltimore, Md.—Warehouse.—John H. Ludwig has purchased lot on South near Pratt street for a client, who will erect three story brick warehouse on the site.

Baltimore, Md.—Dwellings.—Michael W. Ganzhorn, 9 Hopkins Place, has awarded contract to W. N. Hildebrand, Lobe Building, 15 South Gay street, for the construction of six dwellings on Augusta avenue near Massachusetts avenue; 2½ stories, 32x60 feet; frame construction; electric wiring and fixtures; sanitary plumbing; hot-air-heating systems; cost about \$15,000; George Clothier, Jr., architect, Lobe Building, 15 South Gay street.

Baltimore, Md.—Dwellings.—Mrs. Julia F. Griffin has awarded contract to H. D. Griffin, Arlington, for the construction of 20 two-story brick dwellings on Bernard street, to cost about \$15,000; Jacob F. Gerwig, architect, Hoffman Building, 11 East Lexington street.

Baltimore, Md.—Store Building.—Referring to store building to be erected on Baltimore near Charles street by Joseph Castelberg, 106 North Eutaw street, the following contractors are estimating on construction: George A. Fuller Company, American Building, Baltimore and South streets; Morrow Bros., 212 Clay street; John Hiltz & Son, 3 Clay street; Wells Bros. Company, Union Trust Building, Charles and Fayette streets; Henry Smith & Sons Company, 116 South Regester street; Joseph Schamberger, 2122 East Baltimore street; Joseph Lamb, 233 West Preston street; George Bunnecke & Sons, 305 St. Paul street, and M. C. Davis, 5 Hopkins Place; three stories, 39x100 feet; brick with terra cotta trimmings; steel beams; electric wiring and fixtures; sanitary plumbing; heating system; bids to be in June 18; Louis Levi, architect, American Building, Baltimore and South streets.

Baltimore, Md.—Dwelling.—M. H. Ould, 911 Madison avenue, has purchased lot at Roland Park and will erect dwelling on the site.

Baltimore, Md.—Store Building.—The Nelson Shoe Co., 39 West Lexington street, has awarded contract to Israel Griffith, Builders' Exchange Building, 2 East Lexington street, for remodeling store building at southwest corner Little Sharp and Lexington streets. Entire new front of brick and stone will be constructed, and electric wiring and fixtures will be installed; Haskell & Barnes, architect, Central Savings Bank Building, 3 East Lexington street.

Baltimore, Md.—Dwellings.—The St. Paul Realty Co., 301 St. Paul street, has commissioned John R. Forsythe, architect, 411 St. Paul street, to prepare plans and specifications for 46 two-story and 11 three-story brick dwellings to be erected on North avenue, Presbury, 5th and 8th streets; cost about \$75,000.

Baltimore, Md.—Dwellings.—Joseph H. Pertz, builder, 630 West Saratoga street, will erect 10 two-story brick dwellings on 25th street near Guilford avenue, to cost about \$20,000; Jacob F. Gerwig, architect, Hoffman Building, 11 East Lexington street.

Baltimore, Md.—Penitentiary.—Sealed proposals will be received until July 5 by the board of directors of the Maryland Pen-

tentiary for erecting female dormitories, the work to consist of excavating, stone, brick and reinforced concrete work, asphalt roof, metal frames and sashes, skylights, steel window guards, steel cells, etc. All persons desiring to bid on the construction must file their names with Charles M. Anderson, architect, 324 North Charles street, Baltimore, Md., before noon June 29, and drawings and specifications will be ready for distribution on June 23. Usual rights reserved; John F. Weyler, warden, Forrest and Eager streets. The State has appropriated \$134,000 for the work.

Baltimore, Md.—Dwelling.—John C. Legg, Chamber of Commerce Building, Commerce and Water streets, has commissioned Elliott & Emmert, architects, Union Trust Building, Charles and Fayette streets, to prepare plans and specifications for 2½-story brick dwelling to be erected at Roland Park, and cost about \$20,000.

Baltimore, Md.—Church Building.—The Trinity and Calvary Methodist Episcopal churches, South, Forrest J. Prettyman, pastor, 311 West Preston street, will combine in the erection of a church building to cost, including ground, about \$150,000.

Birmingham, Ala.—Depot.—Leonard Martin Construction Co., Chicago, Ill., has contract to erect proposed freight depot for Illinois Central Railroad: one story; 550 feet long.

Birmingham, Ala.—Apartment-house.—R. E. Cooper has contract to erect two apartment-houses for J. A. Rountree, 1800 South Eleventh avenue, recently mentioned; each to be two stories, 50x44 feet; brick veneered; ordinary construction; steam heat; electric fixtures; cost \$10,000; C. W. Collignon, First National Bank Building, architect.*

Bluefield, W. Va.—Dwelling.—Holmboe & Lafferty, Clarksburg and Bluefield, W. Va., are preparing plans and will be ready for bids June 15 for a residence to be erected by S. M. Smith: cement block and shingle; hot-water-heating plant; modern sanitary plumbing; cost \$500.

Bluefield, W. Va.—Church.—First Baptist Church is having plans prepared by Holmboe & Lafferty, Clarksburg and Bluefield, W. Va., for the erection of stone and brick edifice to cost \$18,000; slate roof; hot-air-heating plant. Plans will be ready for bids June 18.

Brundidge, Ga.—Dwelling.—Jekyl Island Club will erect an \$18,000 casino on Jekyl Island; Bowen & Thomas, architects and contractors.

Brunswick, Ga.—Dwelling.—Construction work has commenced on \$30,000 residence to be erected on Jekyl Island by F. H. Goodyear, 350 Elliott Square, Buffalo, N. Y.; Bowen & Thomas, architects and contractors.

Bryan, Texas—Church.—C. E. Jenkins has contract at \$11,788 for erection of edifice for Methodist Episcopal Church, previously mentioned.

Calvert, Texas—Bank Building.—John Robb, Hearne, Texas, has contract to erect building for the First National Bank: two stories, 28x80 feet; brick; cost \$7500.

Carnesville, Ga.—Courthouse.—M. T. Lewellen & Co., Louisville, Ky., have contract to erect courthouse for Franklin county, previously reported; 75x102 feet; stone and brick; fireproof construction; cost \$50,000; W. Chamberlin & Co., architects.

Carthage, Tenn.—Jail Building.—Jarrett & Allard of Crossville, Tenn., have contract to erect proposed jail building.

Catonsville, Md.—Dwellings, etc.—Rockland Realty Co., previously reported incorporated to develop 200 acres of land purchased, will erect country homes with barns, stables, etc. Tormey & Leach, 323 North Charles street, Baltimore, Md., will prepare the plans; company's office, 10 South street, Baltimore, Md.

Centerville, Miss.—School Building.—Plans and specifications are wanted for a school building to cost not more than \$12,000; Dr. J. C. Robert, mayor.

Charleston, W. Va.—Association.—Harding & Upman, 729 15th street N. W., Washington, D. C., are preparing plans for Y. M. C. A. building, previously reported; four stories, 10x100 feet; brick; cost \$75,000.

Charlotte, N. C.—Church.—Chas. C. Haight, 452 Fifth avenue, New York, has prepared plans for edifice to be erected in Dilworth by Church of the Holy Comforter, Francis Osborne, rector; stone; fireproof construction; steam heat; electric lights; to be built in sections; first section to cost \$12,000; cost of completed church \$25,000. Contract for erection to be let in the fall.*

Chattanooga, Tenn.—Office Building.—T. T. Wilson has secured site on which to erect office building to be occupied by the Crucible Steel Co. of America; main office, Pittsburgh, Pa.

Chattanooga, Tenn.—School Building.—Bids will be received until June 16 at office of

Huntington & De Sabla, architects, News Building, for erection of eight-room school building at Ridgedale in accordance with plans and specifications on file in architects' office. Cash or certified check, made payable to J. H. Nicholson, chairman of board of directors, must accompany each bid. Usual rights reserved.

Checotah, I. T.—Building.—Smith & Parr, 322-324 Arnott Building, South McAlester, I. T., are preparing plans and will receive bids for a 2½-story building, 40x80 feet, for the O. O. F. Orphans' Home; brick and sandstone; terra-cotta; concrete flooring; tin roof; gas and electric fixtures; sanitary plumbing; cost \$20,000.

Clarkton, N. C.—Hotel.—Clarkton Hotel Co. has been incorporated with an authorized capital stock of \$25,000 by O. L. Clark, H. A. Currie and others.

Clifton Forge, Va.—Church.—Alleghany Construction Co. has contract to erect proposed edifice for the Christian Church, 47x87 feet; brick with stone trimmings and slate roof; seating capacity 550; cost \$9000.

Dallas, Texas—School Buildings.—J. P. Gilliland is lowest bidder at \$850 for erection of addition to William B. Travis School and at \$9000 for addition to Davy Crockett School, and will be awarded contract.

Decatur, Ala.—Theater.—Ross & Tuttle of New Decatur, Ala., have contract to erect \$15,000 theater, previously mentioned, for the Lyceum Stock Co.

De Funik Springs, Fla.—Amphitheater.—Alabama Stone Co., W. J. Van Kirk, president, Samson, Ala., wants plans for an amphitheater to be built outside of present building, which is 100x120 feet; cost \$20,000.*

De Funik Springs, Fla.—Hotel.—Alabama Stone Co., W. J. Van Kirk, president, Samson, Ala., wants plans for a two-story cement-stone hotel.

Denton, Md.—Jail Building.—Filchard & Turner of Pocomoke City, Md., have contract at \$13,750 for erection of proposed jail building. Steam heat will be installed.

Durham, N. C.—Church.—J. T. & W. A. Salmon have contract to erect proposed addition to Second Baptist Church.

Ennis, W. Va.—School Building.—Bids will be received until June 28 at office of Board of Education of Elkhorn District, Elkhorn, W. Va., for erection of two-story frame school building between Ennis and Switchback. Plans and specifications can be seen at office of R. H. Heyser, secretary. Usual rights reserved.

Fort Smith, Ark.—Office Building.—Commercial Club has purchased site on which to erect a 10-story office building.

Fort Smith, Ark.—Building.—Atkinson Improvement Co. will erect building five to seven stories; fireproof construction; steam-radiation-heating plant; electric fixtures; electric elevators. (This item was mentioned recently.)

Fort Valley, Ga.—Warehouse.—Fort Valley Knitting Mill will erect warehouse.

Fulton, Ky.—Store Building.—N. G. Hill is preparing plans for building reported last week to be erected by M. P. McDowell; 65x100 feet; brick or concrete blocks; steam heat; electric lights; cost \$12,000.*

Gallatin, Tenn.—Store Building.—N. F. Roth is arranging for erection of store building.

Gibson, La.—School Building.—Plans have been prepared by Architect Drago of Monroe, La., for the erection of proposed \$12,000 concrete-block school building.

Granger, Texas—School Building.—Jesse B. Denning & Co., Mexia, Texas, have contract at \$14,500 for erection of proposed brick school building.

Hammond, La.—Masonic Temple.—E. Murray of Jackson, Miss., has contract for the erection of Masonic temple, previously mentioned.

Hattiesburg, Miss.—Church.—First Methodist Church is considering erection of brick edifice with marble facings to cost \$10,000. Address The Pastor.

Hayneville, Ala.—Warehouse.—C. E. McGehee, W. G. Davis and Charles Schneissler have incorporated the Hayneville Warehouse & Commission Co. with \$5000 capital stock.

Hazlehurst, Ga.—Building.—G. S. Hinson and Nancy Hinson will erect building of brick, 80x150 feet.

Higginville, Mo.—School Building.—City will issue \$25,000 of bonds for the erection of high-school building. Address The Mayor.

Homer, La.—Church.—R. L. Rue of Magnolia, Ark., has contract at \$8000 for erection of proposed edifice for Methodist Episcopal Church; H. W. Bowman, pastor.

Houston, Miss.—School Building.—Plans by P. J. Krouse, Meridian, Miss., have been adopted for proposed \$17,000 school building.

Houston, Texas—Building.—R. K. Drake has contract to erect building at St. Anthony's Home, in charge of the Sisters of Charity of the Incarnate Word; two stories, 7x64 feet; cost \$8000.

Huntsville, Texas—School Building.—Jesse F. Denning & Co. of Mexia, Texas, have contract at \$21,475 for erection of school building previously reported; C. H. Page, Jr., of Austin, Texas, architect.

Jackson, Miss.—Buildings.—John T. Willis will superintend the construction of new buildings and various improvements previously reported for State Hospital for Insane, for which \$100,000 is available. R. H. Hunt, Jackson, Miss., and Chattanooga, Tenn., prepared the plans.*

Johnson City, Tenn.—School Building.—City has voted affirmatively the \$17,000 bond issue previously reported for erection of school building. Address The Mayor.

Jonesboro, Ark.—Jail Building.—Bids will be received until July 18 by J. H. Burk, J. H. Mangrum and G. B. Cole, commissioners of Craighead county, for erection of jail building; plans and specifications by W. S. Hull, Jackson, Miss.; on file in clerk's office, Jonesboro. Certified check for \$1000 must accompany each bid. Usual rights reserved.

Kansas City, Mo.—Dwelling.—W. A. Rule has secured permit to erect proposed \$20,000 stone-veneer residence.

Kentwood, La.—School, City Hall and Jail Buildings.—City will expend \$5000 for improving schools and \$5000 for a city hall and jail building. A bond issue was recently reported voted for public improvements; J. P. Chambers, mayor.

Keystone, W. Va.—Bank and Office Building.—John W. Doss, Gary, W. Va., has contract to erect building for the Bank of Keystone, for which Holmboe & Lafferty, Clarksburg and Bluefield, W. Va., were previously reported as preparing plans; cost \$22,000.

Knoxville, Tenn.—Building.—L. A. Galyon has contract to erect building for Mrs. George W. Baxter, replacing structure previously reported burned.

Knoxville, Tenn.—Building.—L. A. Galyon has contract to erect building for McMillan, Hazen & Co., for which Bauman Bros. were mentioned last week as preparing plans.

Lagrange, Ga.—Store Building.—A. F. Walker, Austell Building, Atlanta, Ga., is preparing plans for building reported last week to be erected by the Lagrange Grocery Co.; three stories, 100x112 feet; fireproof mill construction; sprinkler system.

Lexington, N. C.—Dwelling.—Carolina Construction Co. of Greensboro, N. C., has contract for the erection of proposed \$11,000 residence for W. E. Holt, Jr.

Little Rock, Ark.—Telephone Building.—Bids will be received until June 21 at office of Charles L. Thompson, architect, 111 Arkansas Building, Little Rock, Ark., for erection of basement and two-story fireproof building 50x80 feet for Southwestern Telegraph & Telephone Co. Certified check for \$500 must accompany each bid; bids to be made out on printed forms secured from architect. Separate bids will be received on heating, plumbing and wiring. Plans and specifications and proposals forms may be seen and secured at architect's office. Usual rights reserved.

Louisville, Ky.—Building.—Directors of Masonic Widows and Orphans' Home have adopted plans by Charles D. Meyer for erection of proposed addition to cost \$27,000.

Lumber City, Ga.—School Building.—City will vote June 22 on a \$5000 bond issue for school building. Address The Mayor.

Lumpkin, Ga.—School Building.—City will vote July 9 on a \$10,000 bond issue for the erection of school building, previously mentioned. No arrangements have been made for the erection of building. J. B. Richardson is mayor.

Lynchburg, Va.—Library Building.—A memorial library building will be erected at Randolph-Macon Woman's College. J. P. Pettyjohn & Co. will probably be awarded contract.

Macon, Miss.—Jail Building.—Bids will be received until July 3 at office of Z. T. Dorroh, chancery clerk, Macon, Miss., for erection of jail building for Noxubee county in accordance with plans and specifications prepared by W. S. Hull, architect, Jackson, Miss., on file in the clerk's office. Certified check for \$500 must accompany each bid. Copies of plans or further information may be obtained from W. S. Hull, architect, Jackson, Miss., or Z. T. Dorroh, chancery clerk, Macon, Miss. Board of supervisors reserve usual rights.

Macon, Ga.—Dormitory and Library Building.—Plans are being completed for 100-room dormitory to cost \$50,000 and \$20,000 Carnegie Library previously reported to be built by

Mercer University. Dr. S. Y. Jameson of Atlanta, Ga., has been elected president.

Malone, Texas—School Building.—Town has voted affirmatively the \$7000 bond issue, previously mentioned, for erection of school building. Address Town Clerk.

Memphis, Tenn.—Dwelling.—John Gaisford has completed plans for \$7000 brick residence with tile roof to be erected by Mrs. J. C. Ottinger.

Memphis, Tenn.—Hotel.—Selden-Breck Construction Co. has contract for building proposed addition to Hotel Gayoso; six stories and cost \$300,000; G. M. Shaw & Pfleil, architects.

Memphis, Tenn.—Synagogue.—W. La Guif has contract to erect synagogue for Anshe Sphard congregation after plans by L. C. de Van, 336 Randolph Building; 60x65 feet; stone; steam heat; cost \$25,000.*

Meridian, Miss.—Hotel.—Architect Shaw has prepared plans and will receive bids until July 1 for improvements to be made to the Southern Hotel at a cost of \$40,000; addition to be 130x160 feet; mill construction; steam-heating plant; electric fixtures; one passenger and one freight elevator.

Mobile, Ala.—Building.—R. Benz & Sons have completed plans for three-story building to be erected by J. Pollock at a cost of \$40,000.

Monroe, La.—City Hall.—A committee has been appointed to consider plans and specifications for the erection of proposed \$10,000 city hall. Address The Mayor.

Montgomery, Ala.—Capitol Improvements.—Alabama Capitol Building Commission is considering making improvements to interior of Capitol building—new tiling, cleaning and painting woodwork, renewing painting of interior of dome, repainting of woodwork and walls of House and Senate chambers and carpeting both rooms with cork, complete overhauling, rearrangement and enlargement of sanitary and toilet conditions, etc. J. Frank Lockwood will furnish plans and estimates of cost. Contract for building addition was recently reported let to C. C. Tothrow & Co., Birmingham, Ala.

Nacogdoches, Texas—Building.—Kaplan Bros. have let contract for erection of a \$6000 brick building.

Natchitoches, La.—Building.—Bids will be received until June 28 for hotel, bank and store building to be erected by J. Alphonse Prudhomme; brick and concrete construction; composition roof; structural steel and iron; ornamental iron; plumbing; heating; electric wiring, etc.; cost \$25,000 to \$30,000. Plans and specifications may be obtained from Perry, Bridges & Snyder, architects, 406 First National Bank Building, Shreveport, La. Certified check for \$500 must accompany each bid.

Nashville, Tenn.—Sanitarium.—Seventh Day Adventists have purchased the home of C. T. Cole on the Murfreesboro pike, three miles from city, which will be converted into sanitarium. About \$20,000 will be expended in improvements.

Nashville, Tenn.—Dwelling.—Hamilton Love will erect a two-story brick residence to cost \$6000.

Nashville, Tenn.—Exchange Building.—Bids will be received until June 21 by Thompson & Asmus, architects, 74 Cole Building, for erection of a branch exchange building for East Tennessee Telephone Co. Plans and specifications may be examined at main office of company, Chattanooga, Tenn.

Newbern, N. C.—Lodge Building.—Newbern Lodge No. 764, B. P. O. E., mentioned last week as having purchased site on which to erect lodge building, will erect a four-story brick building; ordinary construction, equipped with steam heat and hydraulic or electric elevator; cost \$50,000. Architect will be chosen June 14, and proposals for construction will be invited later.

Newberry, S. C.—Store Building.—Jesse L. Burns has purchased site on which to erect a two-story brick store building.

New Iberia, La.—School Building.—Board of Education has commissioned E. W. Phillips to prepare plans and supervise the construction of two six-room school buildings previously mentioned.

Newport News, Va.—Warehouse.—Edward Morgan has been awarded contract for erection of warehouse, 75x100 feet, for S. W. Holt & Co. after plans by C. T. Holtzclaw. Mr. Morgan was mentioned recently as lowest bidder at \$9997.

New Orleans, La.—Building.—G. Haussman, representing a syndicate, has purchased site on which to erect building.

New Orleans, La.—Building.—P. A. Bacas will erect a four-story building.

Newton, N. C.—Building.—Mack Travin has contract to erect two-story brick building, 27x35 feet, for Rhyne Bros. after plans by W. A. Rhyne; cost \$4500.

Norfolk, Va.—Wharf.—Jamestown Exposition Excursion & Steamboat Co., general offices, 44 Broadway, New York, previously reported organized to operate a line of steamers between Norfolk and the exposition grounds, will build a wharf with a frontage of 185 feet; H. F. McGarvin, general manager.

Norfolk, Va.—Hospital.—Building to be erected at the Norfolk Protestant Hospital, replacing structure recently burned, will be of brick and frame, ordinary construction, and cost \$50,000. Direct-radiation steam-heating plant will be installed; Taylor & Hepburn, Academy of Music Building, architects.*

Ocilla, Ga.—Hotel.—Henderson-Powell Company is reported to build a brick hotel.

Oklahoma City, O. T.—Building.—J. W. Hawk is preparing plans for a two-story building, 60x75 feet, to be erected by a syndicate of local men at a cost of \$10,000.

Opelousas, La.—City Hall.—A committee has been appointed to purchase site on which to erect proposed \$15,000 city hall. Address The Mayor.

Owensboro, Ky.—Tobacco Warehouse.—Davidson County Equity Warehouse Co. has been organized with \$8000 capital stock.

Parkersburg, W. Va.—School Buildings.—City will vote June 10 on a \$75,000 bond issue for building and repairing school buildings; George D. Heaton, secretary board of education.

Pensacola, Fla.—School Building.—Board of Public Instruction has purchased site on which to erect high-school building.

Poplarville, Miss.—South Mississippi College has purchased site on which to erect proposed \$20,000 building.

Poplarville, Miss.—Store and Office Building.—J. C. Hoffman has let contract to John Clapper, Sr., for erection of two-story concrete-block building to be occupied by Poplarville Drug Co. Electric lights will be installed; cost \$7500; W. A. Gill, Jr., architect.*

Rocky Mount, N. C.—Bank and Office Building.—Carolina Construction Co., Greensboro, N. C., has contract to erect three-story bank and office building, 40x110 feet, for Planters' Bank, previously referred to.

Roff, I. T.—Church.—Edifice to be erected by the M. E. Church, South, for which T. J. Smith was previously mentioned as having contract, will be of pressed brick and cost \$6500; J. Q. White, Ardmore, I. T., architect.

Rosebud, Texas—School Building.—Town will vote June 12 on a \$12,000 bond issue for the erection of school building. Address Town Clerk.

Rowlesburg, W. Va.—Building.—Rowlesburg Wholesale Grocery Co., recently organized, will erect a three-story building.

San Antonio, Texas—Buildings.—Henry D. Rehner and William G. Schuwirth have contract for the construction of new buildings, electric wiring, plumbing and heating of buildings at Fort McIntosh; the buildings to consist of field officers' quarters, with stone foundation, \$15,367; barracks, with brick foundation, \$23,012, and \$1200 additional for reinforced-concrete veranda floors; mess hall and kitchen, brick foundation, \$8491; lavatory, brick foundation, \$4450.

Savannah, Ga.—Building.—Savannah Cut Stone Co., C. W. Winstedt, president, has contract to erect building for Frank & Co. after plans by Henry Urban; cost \$45,000.

Seguin, Texas—Building.—The building to be erected by Henry Seligman, for which J. Kiefer, Box 285, was mentioned recently as having contract, will be 40x85 feet; one story; brick; 20-foot walls; 60-foot plate glass front; fireproof construction; electric fixtures; cost \$4500.*

Sewell's Point, Va.—Building.—Bids will be received until June 28 by Brockle & Hastings, architects, 328 Chestnut street, Philadelphia, Pa., for erection of Pennsylvania State building for the Jamestown Exposition. Certified check for 5 per cent. of amount of proposal must accompany each bid. Copies of plans and specifications furnished by architect on deposit of \$10, \$5 of which will be retained. Usual rights reserved.

Sewell's Point, Va.—Building.—Jamestown Exposition Co., Norfolk, Va., will receive bids until June 23 for erection of State's exhibit building on exposition grounds in accordance with plans and specifications prepared by the associated architects and engineers of the Jamestown Exposition Co., which may be obtained on application to the association, third floor New Century Building, Norfolk, Va. A deposit of \$15 required of each applicant for plans and specifications. If drawings and specifications are returned within five days, deposit will be returned; if kept over five days, a charge of \$10 will be made for each set kept and the

charge deducted from original deposit when drawings and specifications are returned. Certified check for \$2000 must accompany each bid. Usual rights reserved.

Shawnee, O. T.—Hotel.—W. F. Callahan is having plans prepared for the erection of four-story addition to Norwood Hotel.

St. Louis, Mo.—Office Building.—Southern Illinois Construction Co. has contract to erect 17-story fireproof steel office building (previously reported) for the Income Leasehold Co. after plans by F. C. Bonsack.

St. Louis, Mo.—Flats Buildings.—Rychluk Bros. have contract to erect 22 two-story separate flats buildings for the Crescent Investment Co. after plans by W. P. Mounts; cost \$88,000.

St. Mary's City, Md.—Building.—St. Mary's Female Seminary reported as contemplating the erection of building or addition for school purposes. Stephen M. Jones of Oakville, Md., can probably give information.

Texarkana, Texas—Telephone Exchange.—Luke Wright, Dallas, Texas, has contract for erection of exchange building for Southwest Telegraph & Telephone Co., Dallas, Texas, previously referred to; two stories, 35x50 feet; fireproof construction; hot-water-heating plant; H. A. Overbeck, Dallas, Texas, architect.

Tifton, Ga.—Church.—Bids will be opened July 1 for erection of edifice for Baptist church after plans by Lockwood Bros., Columbus, Ga.; to be of press brick, limestone, marble, granite and terra-cotta, mosaic tiling; cost \$25,000.

Towson, Md.—School Building.—Henry A. Nagle has contract at \$27,100 for erection of high-school building previously referred to; two stories, 85x77.6 feet; ordinary fireproof construction; steam heat; Thomas L. Jones & Son, architects.

Turner Falls (not a postoffice), I. T.—Hotel, Missouri Construction Co. is having plans prepared by Guy V. McClure, Davis, I. T., for erection of 100-room hotel to cost \$40,000. Hot-air-heating plant and electric-lighting plant will be installed.

Washington, D. C.—Apartment-house.—The North Savings Bank, 2008 14th street N. W., has commissioned Appleton P. Clark, Jr., architect, 65 F street N. W., to prepare plans and specifications for an eight-story apartment-house to be erected at northwest corner 14th and V streets N. W. Plans will also be prepared covering the remodeling of the present building on the site, which is 20x138 feet.

Washington, D. C.—Apartment-house.—Osterman & Butler, builders, Colorado Building, 14th and G streets N. W., will erect apartment-house on Lamont street near Mt. Pleasant avenue N. W.; four stories and basement, 50x100 feet; brick with stone trimmings; structural iron and steel; slate roof; fireproof partitions; electric wiring and fixtures; sanitary plumbing; hot-water-heating system; Wm. J. Palmer, architect, Warder Building, 523 9th street N. W.

Washington, D. C.—Convent.—The Convent of Notre Dame, Sister Apollonia, directress, has commissioned B. Stanley Simmons, architect, 931 F street N. W., to prepare plans and specifications for the reconstruction of one end of the convent building. New building will be four stories, 38x54 feet.

Washington, D. C.—Dwelling.—Charles M. Foulke, 2011 Massachusetts avenue N. W., has awarded contract to John McGregor, 729 12th street N. W., for general alterations and remodeling four-story dwelling at 2011 Massachusetts avenue N. W.; cost about \$15,000; Glenn Brown, architect, 806 17th street N. W.

Washington, D. C.—Dwelling.—Frank Beehive, 1003 F street N. W., has purchased lot on Bancroft Place near Connecticut avenue, Highlands, and will erect dwelling on the site, which is 25x35 feet.

Washington, D. C.—Dwelling.—J. H. Cranford, contractor, 2620 E street N. W., will erect dwelling at 1611 22d street N. W.; four stories, 25x89 feet; brick with limestone trimmings; slate and slate roof; electric wiring and fixtures; sanitary plumbing; hot-water-heating system; elevator; cost about \$15,000; A. B. Mullett & Co., architects, 1411 F street N. W.

Washington, D. C.—Dwellings.—Wm. Yost & Bro., builders, 1002 Pennsylvania avenue S. E., will probably be awarded contract for the construction of three-story brick dwelling at 409 Massachusetts avenue N. W., for John Enders, 489 L street S. W.; Spalding & Spalding, architects, 706 G street N. W.

Washington, D. C.—Dwellings.—Middaugh & Shannon, builders, 2405 1st street N. W., have commissioned B. Stanley Simmons, architect, 931 F street N. W., to prepare plans and specifications for a number of semi-detached dwellings to be erected in the suburbs.

Washington, D. C.—Dwellings.—The Poto-

mac Realty Co. has awarded contract to Wm. P. Lipscomb & Co., 1405 F street N. W., for the construction of two dwellings at 1312 and 1314 16th street N. W.; four stories, 32x78 feet; brick with granite base and Indiana limestone trimmings; tin roofs; electric wiring and fixtures; sanitary plumbing; hot-air-heating system; elevator; cost about \$70,000; Bruce, Price & de Sibour, architects, 1135 Broadway, New York.

Washington, D. C.—Dwellings.—Charles Walker has awarded contract to Burgess & Parsons, 627 F street N. W., for the construction of six two-story brick dwellings at 1001-1011 Irving street N. W., to cost about \$20,000. Hot-air-heating systems will be installed; A. B. Mullett & Co., architects, 1411 F street N. W.

Washington, D. C.—Hotel.—Oscar G. Vogt, architect, Corcoran Building, 15th and F streets N. W., has submitted tentative plans for the construction of hotel building at northeast corner Pennsylvania avenue and 14th streets N. W., for R. T. Warwick, 712 19th street; Christian Heurich, 26th and D streets N. W., and others who are interested in the project; nine stories, 35x149.10 feet; brick with stone or terra-cotta trimmings; steel frame; fireproof construction; ornamental bronze fixtures; electric wiring and fixtures; sanitary plumbing; steam-heating system; elevators; cost about \$400,000. (This building previously mentioned.)

Washington, D. C.—Office Building.—W. B. Hibbs & Co., bankers, 1419 F street N. W., have commissioned Bruce, Price & de Sibour, architects, 1135 Broadway, New York, to prepare plans and specifications for office building to be erected on 15th street between New York avenue and H street N. W.; 10 stories, 37.6x100 feet; marble exterior; steel-frame fireproof construction; interior marble; ornamental iron and bronze work; hardwood finish; electric wiring and fixtures; sanitary plumbing; steam-heating system; two electric elevators; cost about \$250,000. (This building previously mentioned.)

Washington, D. C.—Dwellings.—L. E. Breuninger, builder, 1122 Dartmouth street N. W., will erect eight dwellings at 1222-1236 Irving street N. W.; three stories; brick with stone trimmings; tin roofing; electric wiring and fixtures; sanitary plumbing; hot-water-heating systems; cost about \$45,000; N. R. Grimm, architect, 627 F street N. W.

Washington, D. C.—Store Building.—Jane L. Stone Harrison, 1222 Connecticut avenue N. W., has awarded contract to Samuel H. Edmonston, 611 G street N. W., for the reconstruction of three-story store building 27x83 feet at 1343 F street N. W. New front of brick and stone, steel beams, cast-iron columns and electric wiring and fixtures will be installed; cost about \$7000.

Washington, D. C.—Stores and Apartments. J. Louis Loose, president Washington Florist Co., 13th and F streets N. W., has commissioned Hunter & Bell, 1010 F street N. W., to prepare plans and specifications for 11 stores with apartments above at northeast corner 14th and R streets N. W.; brick with stucco and ornamental terra-cotta trimmings; steel beams; cast-iron columns; tile roof; electric wiring and fixtures; sanitary plumbing; heating system.

Washington, D. C.—Suburban Development. David F. Weaver, 1416 F street N. W.; F. H. Edmonds, 1418 New York avenue N. W., and others have purchased five and one-half acres of land on Wisconsin avenue, and will spend about \$10,000 in constructing cement walks, sewer and water connections.

Washington, D. C.—Warehouse.—The Union Trust Co., 1414 F street N. W., has commissioned A. B. Mullett & Co., 1411 F street N. W., to prepare plans and specifications for storage warehouse to be erected at 1st and L streets N. E.; four stories, 50x100 feet; fireproof construction, probably of reinforced concrete.

Washington, D. C.—Apartment-house.—P. G. Affleck, 1429 Pennsylvania avenue N. W., will erect apartment-house at Sheridan avenue and 16th street N. W.; four stories, 68x63 feet; brick with stone trimmings; steel beams; cast-iron columns; slag roof; electric wiring and fixtures; sanitary plumbing; steam-heating system; cost about \$35,000. Richardson & Burgess, Colorado Building, 14th and G streets N. W., and Fissell & Wagner, Home Life Building, 15th and G streets N. W., are estimating on construction; B. Stanley Simmons, architect, 931 F street N. W.

Washington, D. C.—Dwelling.—Referring to \$25,000 reinforced-concrete dwelling to be erected at Rock Creek road and Piney Branch, Lieut.-Gen. Henry C. Corbin, U. S. A., the following contractors are estimating on construction: Richardson & Burgess, Colorado Building, 14th and F streets N. W.; John McGregor, 729 12th street N. W.; S. J. Prescott

& Co., 700 13th street N. W., and Fissell & Wagner, Home Life Building, 15th and G streets N. W.; D. H. Burnham & Co., architects, 60 Massachusetts avenue N. W.

Washington, D. C.—Club Building.—Washington Lodge No. 15, B. P. O. E., Richard A. O'Brien, chairman of building committee, has commissioned B. Stanley Simmons, 931 F street N. W., to prepare plans and specifications for club building to be erected on H street between 9th and 10th streets N. W.; 3½ stories, 45 feet frontage; cost about \$90,000.

Waycross, Ga.—Hotel.—Waycross Hotel Co. has been incorporated with \$100,000 capital stock by George R. Youmans, George W. Deen, J. M. Bell and Leon A. Wilson to erect a hotel.

Welch, W. Va.—Store and Flat Building.—Kell Bros. have contract to erect building for R. Elsinger, previously reported; two stories; composition roof; metal ceilings; plate-glass front; cost \$12,000. Holmboe & Lafferty of Clarkburg and Bluefield, W. Va., prepared the plans.

Wilmington, N. C.—Apartment-house.—L. H. Koeth, Masonic Temple Building, has prepared plans and will receive bids until June 14 for a three-story frame apartment house, 41x58 feet, to be erected by Dr. D. W. Bullock at cost of \$5000.

Wynne, Ark.—Church.—John Galsford, Memphis, Tenn., has completed plans for proposed \$15,000 edifice for the M. E. Church.

Yazoo City, Miss.—Stable.—C. A. Collins will rebuild livery stable recently reported burned.

RAILROAD CONSTRUCTION.

Railways.

Andalusia, Ala.—An officer of the Central of Georgia Railway Co. writes the Manufacturers' Record denying the press report that contract has been let for an extension from Andalusia to the Gulf of Mexico.

Ashland, Ky.—The Manufacturers' Record is informed that the Ashland Interurban Railway Co. has been organized and has filed a report of survey for a line about six and one-half miles long in Ashland and suburbs and five miles further to Russell, Ky. It is also contemplated to extend from the latter point to Greenup, nine miles. Thomas Bogess, Jr., is secretary at Ashland.

Atlanta, Ga.—The Atlanta, Griffin & Macon Electric Railway Co. has, it is reported, ordered work to begin immediately on the proposed line, 88 miles long, to connect Atlanta, Forrest, Griffin, Forsyth and Macon. The executive committee consists of W. J. Kincaid of Griffin, chairman; W. A. Wimblish of Atlanta, secretary and treasurer; W. J. Massie of Macon, Col. Clifford L. Anderson and Edwin P. Ansley of Atlanta. The engineering department of the N. P. Pratt Laboratory will make the survey and prepare estimates of cost.

Austin, Texas.—The city council has granted a franchise in the city to William Gallatin Carroll & Co. of New York in connection with the proposed Interurban electric railway from Austin to Lockhart.

Baltimore, Md.—The Maryland & Pennsylvania Railroad will, it is reported, build a short connection to the Baltimore & Ohio Railroad in Baltimore. T. M. Ward is engineer at Baltimore.

Benwood, W. Va.—An officer of the Baltimore & Ohio Railroad informs the Manufacturers' Record that there is no truth in the report that the company would raise the track between Benwood and Moundsville, W. Va., on the Ohio River division.

Birmingham, Ala.—A report that the Illinois Central Railroad was surveying for an independent line from Haleyville to Birmingham, about 75 miles, is denied by an officer of the company in a letter from Chicago to the Manufacturers' Record.

Boydtown, Va.—Referring to a recent press report, Mr. B. E. Cogbill, lumber manufacturer, informs the Manufacturers' Record that no definite arrangements have been made to build a railroad into land recently purchased from the Middleby Land & Improvement Co.

Brownsville, Texas.—An officer of the Brownsville, Hidalgo & Northern Railway Co. is reported as saying that contracts will be let about September 1; line to run from Brownsville to Corpus Christi, Hidalgo, Houston, San Antonio and Brazos Island, with a total of 500 miles of track. E. B. Gore is chief engineer at Brownsville, Texas.

Chattanooga, Tenn.—The Chattanooga Northern Railway Co. has applied for a charter to build a railroad from Chattanooga to Walden's Ridge, about 20 miles. The incorporators are W. G. M. Thomas, Thomas MacClellan, J. H. Thomas, Robert J. MacClellan

and L. M. Thomas. The Chattanooga Company, Limited, which owns iron and coal mines, is interested.

Chattanooga, Tenn.—S. H. Fliske of the Great Forks Power Co. is reported to be organizing a company which will build an electric railway from Chattanooga to Nashville, Tenn., about 115 miles.

Dayton, Texas.—The Trinity Valley & Northern Railroad Co. has been incorporated to build a line about 25 miles long from Dayton to Cleveland, Texas. The incorporators are L. Fouts, A. L. Rutt, J. B. Sterling, Dayton; R. I. Sterling, Charles B. Wood, W. B. Cottingham, Champ Ross, Houston; J. O. Tolman, Richmond; C. L. Rutt, Beaumont, and W. H. McGregor of Carson, Texas.

Doxey, O. T.—The Kansas City, Mexico & Orient Railway has, it is reported, purchased the partially-completed railroad between Doxey and Berlin and will extend it northward through Day county. M. P. Pare is chief engineer at Kansas City, Mo.

Dublin, Ga.—The Dublin & Southwestern Railroad Co. has, it is reported, appropriated \$21,000 to be used for extending the line from Eastman toward Cordele, Fitzgerald or some other point. E. P. Rentz is president at Dublin.

Elberton, Ga.—W. O. Jones of Elberton and J. D. Mathewson of Hartwell, Ga., with a party of engineers, are making a survey for the Hartwell & Washington Railroad.

Eldorado, Ark.—Reported that the Eldorado & Wesson Railroad has let grading contract to E. J. Seymour and the pile-bridging contract to Parks & Covington; work to be finished by September 15; James Harrington, chief engineer; C. V. Edgar, president.

Fort Valley, Ga.—Mr. C. L. Shepard informs the Manufacturers' Record that the proposed Miona Springs Railroad will be about 26 miles long, and it is the purpose of the organizers to begin construction about July 1.

Gadsden, Ala.—Reported that the Southern Steel Co. proposes to build a short line of railroad at Altoona, Ala., to reach some new mine openings.

Gainesville, Ga.—The Southern Railway will, it is reported, build a spur about two miles long from Pacolet Mill at New Holland to the Gainesville Cotton Mills. M. Muller is assistant engineer in Atlanta, Ga.

Galveston, Texas.—An officer of the Santa Fe system, referring to the report that improvements would be made at the Galveston Union Depot, informs the Manufacturers' Record that the work consists of lengthening the present passage tracks 300 feet and putting in one additional track.

Galveston, Texas.—The Peach River & Gulf Railroad, 11 miles long, will, it is reported, build an extension from Midline to Beaumont, Texas, about 65 miles, and another extension from Timber to connection with the International & Great Northern Railroad between Conroe and Willis, about 12 miles. The line is controlled by the Miller & Vidor Lumber Co. of Galveston, and A. W. Miller is president.

Gassaway, W. Va.—The Gassaway, Elk River & Huttonsville Railroad Co. has filed its charter in Harrison county to build a line from Gassaway to Webster Springs, and thence to Huttonsville through Braxton, Webster and Randolph counties. The incorporators are T. M. Jackson, Clarksburg; E. B. Carlin, Sutton; J. M. Hoover, Webster Springs; Elihu Hutton, Huttonsville, and L. H. Kelley, Sutton, W. Va.

Grafton, W. Va.—Two corps of engineers are reported to be surveying along Elk creek towards Clarksburg, one for the Baltimore & Ohio Railroad and the other for the proposed West Virginia Connecting Railroad, in which D. F. Maroney of Pittsburg, J. V. Thompson of Uniontown, Pa., and others are interested. The chief engineer of the Baltimore & Ohio is D. D. Carothers at Baltimore.

Hartford, Ky.—Walton, Wilson & Roden of Knoxville, Tenn., have, it is reported, been awarded a contract to build the Madisonville, Hartford & Eastern Railroad, of which J. W. Ford of Hartford, Ky., is president. The line will run from Madisonville via Hartford to a connection with the Louisville, Henderson & St. Louis Railroad, 60 miles.

Hattiesburg, Miss.—Dr. J. R. Pitts of Waynesboro, president of the Waynesboro, Pascagoula & Gulf Coast Railway Co., and one of the promoters of the Hattiesburg & Mammoth Springs Interurban Electric Railroad, is reported as saying that construction will begin immediately after organization, which will take place within a few days.

Houston, Texas.—E. M. House of Houston is reported to be negotiating with Stone & Webster of Boston, Mass., for building the proposed electric railway from Houston to Galveston, 51 miles. G. E. Tripp, representing Stone & Webster, is reported as saying

that negotiations have been closed. He investigated the project.

Iuka, Miss.—The charter of the North Mississippi Traction Co. of Iuka has been approved; capital \$200,000. The incorporators are A. H. Longino, A. J. Hackett, Newnan Cayce and others.

Jackson, Miss.—The Southern Railway, it is reported, is surveying for a line from Greenwood to Jackson. W. H. Wells is engineer of construction at Washington, D. C.

Joplin, Mo.—D. B. Holmes, H. C. Page, G. W. Carpenter and John S. Southerland of Kansas City are reported to be working on a plan for an electric railway from Joplin, Mo., to Pittsburg, Kan. Incorporation articles have been filed.

Kansas City, Mo.—An officer of the Burlington system informs the Manufacturers' Record that the proposed double-tracking between Kansas City and St. Joseph, Mo., is under consideration, but nothing definite is decided regarding it. Grading on the Waldrum and Beverly cut-off is finished. This is 11 miles long. A. W. Newton is engineer at St. Louis.

Kansas City, Mo.—President J. J. Helm of the proposed Kansas City, St. Joseph & Excelsior Springs Electric Railway is quoted as saying that engineers are making a survey, but that construction will not begin until the fall.

Kansas City, Mo.—An officer of the Kansas City, Mexico & Orient Railway writes the Manufacturers' Record denying the press report that the company had purchased the partially-completed railroad between Doxey and Berlin, O. T., and would extend it.

Knoxville, Tenn.—The Southern Railway is reported to have nearly completed its yard at Coster, the five new tracks making a total of six miles. Other tracks are also being laid. The Callahan Construction Co. has completed the grading contract.

Leesville, La.—An officer of the Kansas City Southern Railway informs the Manufacturers' Record that the press report that the company would build a line through the rice belt via Crowley, La., to New Orleans is erroneous, and that the line referred to is probably that of the Central Railway of Louisiana, now being constructed from Leesville, La., on the Kansas City Southern.

Memphis, Tenn.—H. E. Croft, vice-president, is reported as saying that contracts will be let within six weeks for the Lakeview Traction Co.'s line from Memphis to Clarksdale, Miss. Thomas Taggart of French Lick, Ind., is president.

Morehead, Ky.—The Morehead & West Lumber Railroad has been sold at auction to the Morehead & North Fork Railroad Co., which will, it is said, complete the line from Clark Mountain to Paragon, Ky. E. W. Hess is chief engineer.

Morris Ferry, Ark.—W. S. Pryor of Kansas City is reported as saying that about a mile and a half of line has been finished and about nine miles are graded on the proposed railroad from Morris Ferry, Ark., to Paris, Texas. Connection is already made with the Kansas City Southern for hauling lumber, and the grade extends to the Frisco line.

Moss Point, Miss.—W. Denny & Co., lumber manufacturers, are reported to have completed their new railroad to pine lands. It will extend to Evans Gap, on the Mobile, Jackson & Kansas City Railroad.

Natchez, Miss.—Reported that the Natchez & Eastern Railroad is preparing to build 30 miles of line between Natchez and Columbus, Miss. J. S. Butterfield of Norfield, Miss., is president.

Newbern, N. C.—Construction has begun on the proposed Washington & Newbern Railroad, starting from a connection with the Pamlico, Oriental & Western Railway on the Neuse river. B. B. Collins is said to have the contract. Line will be 35 miles long.

New Orleans, La.—The New Orleans & Baton Rouge Railroad Co., capital \$2,500,000, has filed its charter to build a line from New Orleans to Baton Rouge, La., about 80 miles. The incorporators are W. O. Orton, C. S. Young, Edward Godchaux, Rene H. Himel, Walter Godchaux and F. E. Larue. Edward Godchaux is reported as saying that the line will be electric, everything is ready, and construction will begin at a very early date. The Messrs. Godchaux are of the Leon Godchaux Company of New Orleans. Survey is made.

New Orleans, La.—President W. F. Owen of the New Orleans, Crowley & Western Railway is reported as saying that location survey has been made and construction will begin soon. The main line will be about 162 miles long from New Orleans to the Jennings oil field.

Opelika, Ala.—Reported that construction is practically finished between Dothan, Ala., and Cottontale, Fla., about 35 miles, on the

Atlanta & St. Andrews Bay Railway. A. B. Steele of Atlanta, Ga., is president and general manager.

Orangeburg. S. C.—J. J. Timme and J. C. Lavin of New York have conferred with the Business Men's League, of which R. H. Jennings is president, concerning the building of the proposed electric railway from the town of North via Orangeburg to Ferguson, on the Santee river, about 55 miles.

Orlando. Fla.—Reported that the Seaboard Air Line is surveying for a railroad from Conway, four miles southeast of Orlando, to a large tract of timber land about 70 miles distant. W. L. Seddon is chief engineer at Portsmouth, Va.

Owenton, Ky.—Survey is reported under way for an extension of the Carrollton & Worthville Railroad from Worthville to Owenton. H. J. Gayle is general manager at Carrollton, Ky.

Roanoke, Va.—The Cumberland Corporation, recently chartered in Richmond, will, it is reported, back a plan to connect the principal towns and cities in the southwestern part of Virginia with electric railways. H. S. Trout of Roanoke is president; James P. Woods, vice-president, and C. I. Wade of Christiansburg, Va., secretary and treasurer.

Roanoke, Va.—M. A. Rife of Roanoke is reported to be securing right of way along the Roanoke river for an electric railway from Roanoke to Salem, Va. It is said that W. N. Camp is interested.

Rock Hill, S. C.—Mr. J. G. Anderson, president of the Rock Hill Buggy Co., writes the Manufacturers' Record that the proposed Rock Hill Railroad has not yet taken definite shape, but will undoubtedly be built. The line will run from Rock Hill to Spencer, on the Seaboard Air Line, about eight or nine miles.

Rome, Ga.—The Southern Railway Co. will, it is reported, enlarge its yards at Rome. M. Muller, assistant engineer at Atlanta, can probably give information.

San Antonio, Texas.—The Texas Railway Co. informs the Manufacturers' Record that the contract has been let, as reported, to the Rock Island Construction Co. of Chicago, Ill. L. A. Guerlinger is engineer in charge at Victoria, Texas.

Shelbyville, Ky.—Luther H. Leber, Emeline, Ky., general manager, is reported as saying that 12 miles of the Shelbyville & Ohio River Electric Railroad has been graded from Shelbyville to Milton, Ky. The entire line will be about 52 miles long.

Taloga, O. T.—Reported that the St. Louis & San Francisco Railroad will build an extension to Taloga and that an agreement has been closed with citizens of that place. J. F. Hinckley is chief engineer at St. Louis.

Taylor, Texas.—J. A. Thompson has been appointed to employ engineers to make a survey for the proposed railroad from Taylor to Houston, Texas.

Valdosta, Ga.—The Valdosta, Moultrie & Northwestern Railroad Co., which proposes to build a line from Valdosta to Moultrie, Ga., about 35 miles, has filed charter. The incorporators are C. R. Ashley, E. P. Rose, R. F. Ousley, J. Y. Blitch, J. A. Dasher, H. C. Briggs and D. C. Ashley.

Versailles, Ky.—The Louisville & Atlantic Railway will, it is reported, build an extension from Beattyville through Lee, Wolfe, Breathitt, Magoffin and Floyd counties. Engineers are making the survey. J. P. Amsden is president, and R. N. Hudson, general manager, at Versailles, Ky.

Wallsburg, Texas.—The Port Arthur & Houston Short Line, it is said, may now be built, the movement having again been taken up. S. A. Ward and others are interested.

Waynesboro, Tenn.—The Wayne Railway Co. of Wayne county has been chartered; capital \$35,000; incorporators, T. H. Allen of Florence, Ala.; D. H. Bacon, J. W. Stults, J. E. Cole and J. H. Craig. Line probably to be a continuation of the Mineral Belt Railway, lately incorporated in Alabama by T. H. Allen and others. Line 50 miles long, Florence, Ala., to Mannie, Tenn., on the Nashville, Chattanooga & St. Louis Railway.

Wiggins, Miss.—The Finkbine Lumber Co. is reported to be extending its logging road to a connection with the Mobile, Jackson & Kansas City Railroad. Only three miles of track remain to be built.

Street Railways.

Birmingham, Ala.—The Birmingham Railway, Light & Power Co. proposed to build a line to Avondale and another to South Highlands, besides double-tracking several of the existing routes.

Clairemore, I. T.—Reported that a street railway company is being organized to build a line from the railway station to Radium Wells. The Mayor may be able to give information.

Pensacola, Fla.—Reported that the Pensacola Street Railway Co. is considering an extension of the North Hill line to Goulding, about three miles.

MACHINERY, PROPOSALS AND SUPPLIES WANTED.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.

Advertising Novelties.—Benito Sarabia, Apartado 130, Mazatlan, Sinaloa, Mexico, wants to correspond with manufacturers of advertising novelties relative to securing agency.

Boiler.—Gray Veneer & Panel Co., China Grove, N. C., wants 80-horse-power boiler. (See "Engine and Boiler.")

Boiler.—J. M. Bandy, Greensboro, N. C., wants prices on 100-horse-power boiler.

Boilers.—See "Engines and Boilers."

Brick Machinery.—Ennis-Crisp Brick Co., A. J. Mullican, president, Crisp, Texas, wants complete equipment for two-press brick plant; capacity, 40,000 dry press brick in 10 hours.

Bridge Construction.—Bids will be opened June 18 at courthouse, Wilmington, N. C., for construction of concrete bridge over Mill creek near National Cemetery, according to plans and specifications on file at office of M. W. Divine. Usual rights reserved. D. McEachern, chairman board of county commissioners.

Bridge Construction.—Craven County Commissioners, C. E. Foy, chairman, Newbern, N. C., will let contract for iron bridge across Neuse river near Maple Cypress and Fort Barnwell.

Bridge Construction.—Sealed bids marked "Bids for Highway Bridge," and addressed to W. F. Sanders, supervisor of Beaufort county, Beaufort, S. C., will be received until July 2 for construction of steel bridge near Beaufort. Bids are requested for two types of piers—plain concrete and cylinder filled with concrete. Plans and specifications can be seen at office of supervisor, also by applying to W. F. Brown, engineer, Courthouse, Savannah, Ga. Certified check for 5 per cent. of each bid must accompany proposal. Usual rights reserved.

Bridge Construction.—See "Levee Work."

Building Equipment and Supplies.—The Spalding Company, 617 Austell Building, Atlanta, Ga., is prepared to arrange for representing manufacturers of building equipment or supplies.

Building Materials.—John Clapper, Poplarville, Miss., wants prices on tiles for flooring, skylights, etc.

Building Materials.—Alabama Stone Co., Samson, Ala., wants building materials, Portland cement, reinforced concrete.

Building Materials.—Frank Lanier, Americus, Ga., wants bids on tile, hardwood floors, leaded glass, large columns, etc.

Building Materials.—John T. Willis, superintendent of construction, Jackson, Miss., will receive bids for material to be used in construction of two general hospital buildings and several minor buildings to be erected at State Hospital for Insane, Jackson, including prismatic glass, promenade galleries enclosed with iron grille work for main building, underpinning foundations of several of present buildings and general repairs.

Building Materials.—Orleans Metal Bed Co., Ltd., New Orleans, La., wants building materials.

Building Materials.—Wonderland Amusement Co., Atlanta, Ga., wants building lumber, hard plaster, cement, cold-water paint, etc.

Building Materials.—J. Klefer, Box 268, Seguin, Texas, will receive price-lists monthly on plate glass, steel beams, structural-iron work, etc.

Building Materials.—J. A. Rountree, 1800 South Eleventh avenue, Birmingham, Ala., wants prices on windows, doors, mantels and shingles.

Building Materials.—White City Amuse-

ment Co., Ltd., 701 Hibernia Bank Building, New Orleans, La., wants prices on building material and steel for aerial railway and tower.

Building Materials.—Rev. Francis Osborne, rector Church of the Holy Comforter, Dilworth, Charlotte, N. C., wants prices on brick and stone in quantities.

Building Materials.—Stamford Realty & Investment Co., Stamford, Texas, wants prices on building materials, lumber, etc.

Building Materials.—Frank D. Moses, Tren-ton, N. J., wants prices on cement, sand, gravel and concrete blocks, delivered at Ashland, Va.

Cement.—See "Building Materials."

Cement.—Henry B. F. Macfarland, Henry L. West and John Biddle, commissioners, Washington, D. C., will open bids June 15 for furnishing the District government with 28,500 barrels, more or less, of Portland cement during the fiscal year ending June 30, 1907. Specifications, blank forms of proposal and all necessary information may be obtained on application.

Cement.—See "Building Materials."

Cement Mixer.—Alabama Stone Co., Samson, Ala., wants medium-size cement mixer.

Chemical Works.—Oscar Karsten, Vienna, Austria, wants addresses of manufacturers of chemicals, such as ether and amyl acetate, soluble cotton, etc.

Chop Mill.—Frisco Grain & Elevator Co., Frisco, Texas, wants chop mill. (See "Corn Mill.")

Clay and Talc.—E. H. Neal, 610 Rover avenue southwest, Roanoke, Va., wants addresses of manufacturers of fireproof clay and talc.

Concrete-block Machinery.—"Box 53." Oriental, N. C., wants to correspond with manufacturers of concrete-block machinery.

Concrete Culvert.—Board of Public Works, J. E. Wilhelm, secretary, Paducah, Ky., will receive bids until June 20 for construction of concrete culvert over Cross creek on Caldwell street; plans and specifications on file in city engineer's office. Certified check must accompany each bid. Usual rights reserved.

Concrete Machinery.—C. T. Porter, Silver City, Miss., wants concrete machinery.

Cooperage.—Oklahoma Refining Co., Room 308, Baltimore Building, Oklahoma City, Okla., wants iron and wood cooperage.

Construction Work.—See "Railroad Construction."

Contractors' Equipment.—J. F. Donahoo, Bond Building, Washington, D. C., wants 50 3, 4, 6 or 12-yard two-way dump cars, K. & J. pre-ferred.

Corn Mill.—Frisco Grain & Elevator Co., Frisco, Texas, wants corn mill. (See "Chop Mill.")

Cotton Mill.—Moncure Dabney, Vicksburg, Miss., wants information regarding cotton-spinning mill, estimates on equipment, etc.

Cotton-mill Equipment.—Company being organized by M. C. Winston and others, Selma, N. C., will want to buy equipment for 10,000-spindle hosiery-yarn mill by July 14.

Crushers.—Peerless Glass Sand Co., Berkeley Springs, W. Va., wants crushers. (See "Glass-sand Plant.")

Cupola.—See "Foundry Equipment."

Derricks.—John Clapper, Poplarville, Miss., wants prices on derricks.

Ditching Machinery.—Robert Ranson, St. Augustine, Fla., wants information from manufacturers on ditching machinery of two kinds, one for small laterals and one for main ditches. The soil is sand with clay subsoil, free of rock, and the average depth of drains from four to eight feet.

Dredging.—Bids will be received until June 22 by Major Francis R. Shunk, United States engineer office, Jacksonville, Fla., for dredging St. Johns river; work to consist of dredging canal to depth of 24 feet at mean low water and widening it to 300 feet, and removal of 15,500 cubic yards of rock and about 75,000 cubic yards of soft material. Information furnished on application.

Drums.—Socean Chemical Works, Florence, S. C., wants quotations on wood drums 20 inches long and 15 inches in diameter.

Dryers.—Peerless Glass Sand Co., Berkeley Springs, W. Va., wants dryers. (See "Glass-sand Plant.")

Electric Plant.—John T. Willis, superintendent of construction, wants bids on installation of additional electric plant at State Hospital for Insane, Jackson, Miss.

Electric Plant.—Sealed proposals will be received until June 25 at the office of Capt. John Stephen Sewall, constructing office, United States Soldiers' Home, Washington, D. C., for the erection of power-house, installation of boiler plant, generating machin-

ery, main switchboard, steam-laundry equipment, refrigeration plant and power-house piping; also for tunnels and conduits for hot-water, steam refrigeration and electricity distribution from central plant; also for heating and ventilating apparatus in new mess hall and dormitory building. Further information may be obtained from office of constructing officer.

Electric Plant.—Holden Real Estate Co., Sanford, Fla., wants to correspond with manufacturers of equipment for electric-light and power plants.

Electric Wiring.—See Building Note under Little Rock, Ark.

Electrical Equipment.—Massee & Felton Lumber Co., Macon, Ga., wants two 100-horse-power motors, one 150-horse-power motor, two 75-horse-power motors for operating machinery in sash, door and blind factory and planing mill.

Electrical Equipment.—Frisco Grain & Elevator Co., Frisco, Texas, wants 250-light dynamo.

Electrical Equipment.—White City Amusement Co., Ltd., 701 Hibernia Bank Building, New Orleans, La., wants prices on electrical equipment.

Electrical Equipment.—J. A. Rountree, 1800 South Eleventh avenue, Birmingham, Ala., wants prices on electric wiring for two two-story apartment-houses.

Electrical Materials.—Wonderland Amusement Co., Atlanta, Ga., wants electrical materials.

Elevator.—J. R. Smith & Bro., Ayden, N. C., wants cuts and prices of hand-power elevators.

Engine.—See "Water System."

Engine.—Massee & Felton Lumber Co., Macon, Ga., wants a 500 to 600-horse-power simple Corliss engine.

Engine.—Holland-Blow Stave Co., Decatur, Ala., wants one 30 or 40-horse-power Atlas engine (stationary), either new or second-hand.

Engine.—P. O. Box 861, Norfolk, Va., wants a second-hand left-hand Corliss engine of standard make, about 60 horse-power.

Engine and Boiler.—Gray Veneer & Panel Co., China Grove, N. C., wants 50-horse-power engine and 80-horse-power boiler.

Engines.—J. W. Miner, Ronda, N. C., wants quotations on three or four-horse-power kerosene-oil engine; also gasoline engine, three horse-power; second-hand.

Engines and Boilers.—White City Amusement Co., Ltd., 701 Hibernia Bank Building, New Orleans, La., wants prices on engines and boilers.

Engines and Boilers.—Ennis-Crisp Brick Co., A. J. Mullican, president, Crisp, Texas, wants engines and boilers.

Fire-protection Apparatus.—M. O. Bellinger, rod, consulting concrete engineer, 920 Empire Building, Atlanta, Ga., wants addresses of manufacturers of automatic-sprinkler equipment for cotton warehouses and mills. Send catalogues, price-lists, blueprint plans for system (including specifications) for warehouse of from 1000 to 10,000 bales of cotton capacity.

Foundry Equipment.—Peerless Machine Works, Rocky Mount, N. C., wants one 2000-pound cupola and fan, also complete foundry equipment.

Glass-sand Plant.—Peerless Glass Sand Co., Berkeley Springs, W. Va., wants crusher, mills and dryers.

Grading.—W. B. Townsend, general manager Little River Lumber Co., Townsend, Tenn., will receive bids until June 20 for the grading of proposed railway extension on east prong of Little river; proposals to be made on blank forms furnished by company in accordance with plans and specifications at Townsend, Tenn.; at 218 Girard Building, Philadelphia, Pa.; at office of Clearfield Lumber Co., Clearfield, Pa., and office of E. W. Hess, engineer, Clearfield, Pa. Usual rights reserved.

Grinding Machinery.—E. T. Le Baron, P. O. Box 983, Jacksonville, Fla., wants estimates on a plant for grinding iron oxide having a daily capacity of 10 tons.

Heating and Ventilating.—See "Electric Plant."

Heating Apparatus.—J. A. Rountree, 1800 South Eleventh avenue, Birmingham, Ala., wants prices on steam-heating apparatus for two two-story apartment-houses.

Heating Apparatus.—See Building Note under Little Rock, Ark.

Heating Apparatus.—John T. Willis, superintendent of construction, wants bids for steam-heating plant to be installed at State Hospital for Insane, Jackson, Miss.

Heating Apparatus.—Board of trustees Monroe (N. C.) graded school wants information

regarding heating plant for school building; will consider steam, hot water or furnace. Address S. O. Blair, chairman, Monroe, N. C.

Heating Apparatus.—M. P. McDowell, Fulton, Ky., wants prices on steam-heating apparatus.

Heating Apparatus.—Taylor & Hepburn, Academy of Music Building, Norfolk, Va., want information regarding steam-heating systems for hospitals.

Heating Apparatus.—James Knox Taylor, supervising architect, Treasury Department, Washington, D. C., will open bids July 11 for low-pressure steam-heating apparatus for United States postoffice and courthouse-building at Sherman, Texas, in accordance with drawings and specifications, copies of which may be had at office of supervising architect, or at office of superintendent at Sherman, Texas, at discretion of supervising architect.

Ice Machinery.—Holden Real Estate Co., Sanford, Fla., wants addresses of manufacturers of ice machinery.

Ice Plant.—J. A. Kelly, Jasper, Texas, wants bids on a 12-ton ice plant.

Ice Plant.—Gus L. Klein, Raceland, La., wants bids on a 5-ton and 10-ton ice plant complete.

Knitting Mill.—Moncure Dabney, Vicksburg, Miss., wants information regarding knitting mill, estimates on equipment, etc.

Laundry Machinery.—See "Electric Plant."

Levee Work.—Contract will be let July 6 at the courthouse, Poplar Bluff, Mo., at public outcry, for digging five drainage ditches and three levees in Butler county, Missouri; total length of ditches about 80 miles; excavations about 2,168,000 cubic yards of earth; levees about 19 miles long and contain about 475,000 cubic yards of earth. There are six wooden bridges, one 60-foot-span iron bridge and two railroad trestles to be built and two iron bridges to be removed and replaced; work to be inspected monthly as completed and paid for in full. Usual rights reserved. For further information call on or address George C. Orchard, clerk County Court, Butler county, Poplar Bluff, Mo.

Lighting Fixtures.—Frank Lanier, Americus, Ga., wants bids on lamp fixtures for residence.

Lumber.—See "Building Materials."

Lumber.—"No. 593," care of Manufacturers' Record, wants Pennsylvania red-maple lumber in 7-4, 8-4, 9-4 and 10-4.

Machine-works Equipment.—S. A. Lewis, Latta, S. C., wants equipment for manufacture of agricultural implements. (See "Woodworking Machinery.") W. J. Montgomery, Marion, S. C., was mentioned last week as to be addressed regarding this equipment.

Machine Tools.—Massee & Felton Lumber Co., Macon, Ga., wants one machinist's lathe, about 20 inches; one drill press for general repair work, one shaper, about 20 inches.

Mills.—Peerless Glass Sand Co., Berkeley Springs, W. Va., wants mills for glass-sand plant. (See "Glass-sand Plant.")

Mining Machinery.—W. K. Azbill, Columbia, Ky., wants machinery for mining coal.

Refrigerating Machinery.—See "Electric Plant."

Paint.—Wonderland Amusement Co., Atlanta, Ga., wants cold-water paint.

Paper Cutter.—W. C. Pope, editor of the Weekly Star, Lumberton, N. C., wants a small paper cutter.

Paving.—John T. Willis, superintendent of construction, wants bids for laying cement pavements at State Hospital for Insane, Jackson, Miss.

Paving.—Board of Improvement, Lake Village, Ark., will open bids July 1 for construction of about 52,000 square feet of concrete walk; work to commence not later than August 1 and be completed by November 1, 1906. Specifications and blank form for bids can be obtained on application. Usual rights reserved.

Paving.—Bids addressed to Council Committee on Streets will be received until June 18 at office of H. L. Schaner, city engineer, Lynchburg, Va., for paving various streets; work to approximate 4100 cubic yards excavation, 9900 square yards of sidewalk paving and the removal of 2800 square yards of sidewalk; work to be let separately or as a whole. Plans can be seen, specifications and forms of proposals and contracts obtained at the city engineer's office. Certified check must accompany each bid. Usual rights reserved.

Paving.—Sealed proposals, addressed to the Board of Awards, Baltimore, Md., will be received until June 20 at the office of Harry F. Hooper, city register, City Hall, to grade, curb and pave certain streets with asphalt

blocks. Specifications and proposal sheets may be obtained from office of B. T. Fendall, city engineer, City Hall.

Paving.—Bids will be received until June 23 at the mayor's office, Randleman, N. C., for grading, curbing and macadamizing the main street; amount will approximate \$10,000 or \$12,000; constructing sidewalk a side contract. Bids to be received as a whole. Certified check for \$250 must accompany each bid, made payable to the secretary of the board of aldermen. Specifications, etc., may be obtained from the mayor or city engineer, High Point, N. C.

Paving and Sewerage.—Board of Improvement Sewer District No. 2 and Paving District No. 5, Fort Smith, Ark., will receive bids early in July for paving 50 or more miles of streets with paving brick on a cushion of three-inch sand; width of pavement to vary from 15 to 30 feet, with a probable average of 20 feet; bids for the work to be taken by the square yard, with privilege of adding to above amount. Bids will also be taken at the same time for laying about 50 or more miles of sewers, six miles of which will be built of brick or cement. Approximately one will be 15 feet or larger in diameter, two miles will be 10 feet or larger in diameter, and the three remaining miles will be from three to six feet in diameter.

Paving Material.—J. H. Macleary, Suffolk, Va., wants to correspond with manufacturers of octagon asphalt blocks for paving purposes.

Piping.—See "Water-works, etc."

Piping.—See "Water-works Equipment."

Plumbing.—See Building Note under Little Rock, Ark.

Plumbing.—John T. Willis, superintendent of construction, wants bids for replumbing buildings at State Hospital for Insane, Jackson, Miss.

Printing Press.—W. C. Pope, editor Weekly Star, Lumberton, N. C., wants a small job press (say 10x14) suitable for ordinary job work; second-hand or rebuilt machinery preferred.

Pump.—See "Water System."

Pump.—H. B. Wordehoff, Plant City, Fla., wants one Marsh steam pump, No. 4.

Pumps.—See "Water-works Equipment."

Railroad Construction.—Crystal River Lumber Co., Crystal River, Fla., will let contract for the grading and building of six miles of railroad; 10,000 ties to cut; will divide contract into small lots to suit bidders, or will contract all to one responsible person. Work must commence quickly. Information on application.

Railroad Construction.—Callahan Construction Co., main office, Knoxville, Tenn., will let contract for 80 miles of good work from Atlanta, running southwest to near Warm Springs, Ga., on Atlantic, Birmingham & Atlantic Railroad. Desirable winter and spring work; good labor section. Communicate by letter with E. R. Keller, general superintendent, Bullochville, Ga., or by wire to same party at Warm Springs, Ga., until August 1; after that at Atlanta, Ga.

Railway Equipment.—T. G. Skinner, Hertford, N. C., wants one or one and one-half miles of 16- or 20-pound relaying rails.

Railway Equipment.—James F. White, Nicetor, N. C., wants one-half mile of 16-pound or 20-pound second-hand rails.

Railway Equipment.—J. F. Donahoo, Bond Building, Washington, D. C., wants 10 locomotives; "Vulcans" preferred.

Railway Equipment.—Berkeley Limestone Co., S. W. Shoop, superintendent, Martinsburg, W. Va., wants 1000 feet 40-pound relaying rails and splices in good condition.

Railway Equipment.—Oklahoma Refining Co., Room 308, Baltimore Building, Oklahoma City, O. T., wants tank cars.

Refrigerating Equipment.—Saluda Trade Co., Saluda, N. C., wants a cooling refrigerator or cooling-room for meat market; outside dimensions 5 feet from front to back, 8 feet 4 inches wide and 9 to 10 feet high. Send catalogues.

Road-building.—Bids will be received until June 30 by Greenleaf Johnson Lumber Co. of Norfolk, Va., for construction of three miles of roadbed, approximately 22,000 cubic yards of excavation, in Warren county, North Carolina. Profile and specifications may be seen at company's office at Vaughan, N. C., on Seaboard Air Line. Usual rights reserved.

Road Improvements.—Bids will be received until June 23 by Ohio County Commissioners at office of T. C. Moffat, clerk, Wheeling, W. Va., for macadamizing county roads during the year; the work to consist of macadamizing 5275 yards of road in Tridelpia, Richland, Liberty and Ritchie and 740 yards of the Cumberland road. Usual rights reserved.

Rolling-mill Machinery.—Charles H. Rife, Tulsa, I. T., wants machinery for rolling mill.

Roofing and Siding.—Rosh Mill & Gin Co., Rosie, Ark., wants sheet iron as follows: $\frac{1}{2}$ squares of 6-foot corrugated, 30 squares 8-foot corrugated, 15 squares 7-foot V-crimped, $\frac{1}{2}$ squares 8-foot V-crimped, 46 feet ridge caps.

Saw-mill.—Magnolia Manufacturing Co., Magnolia, Ark., wants new or good second-hand band mill.

Sewerage System.—See "Water-works, etc."

Sewerage System.—See "Paving."

Shirt Manufacturers.—Benito Sarabia, Apartado 130, Mazatlan, Sinaloa, Mexico, wants to correspond with manufacturers of shirts relative to securing agency.

Shoe Manufacturers.—Benito Sarabia, Apartado 130, Mazatlan, Sinaloa, Mexico, wants to correspond with shoe manufacturers relative to securing agency.

Sluice Gates.—Henry B. F. Macfarland, Henry L. West, John Biddle, commissioners, Washington, D. C., will receive bids until June 25 for furnishing sluice gates. Forms, specifications and information on application.

Steam Shovels.—J. F. Donahoo, Bond Building, Washington, D. C., wants to model delivery three Marion shovels, model "60" or equivalent. State lowest cash price, length of time in service, shop number, time leaving, what point it can be inspected.

Street Signs, etc.—L. H. Wannamaker, city clerk and treasurer, Orangeburg, S. C., will receive bids until July 5 for furnishing and installing street signs and house numbers. Information furnished on application.

Structural Steel.—White City Amusement Co., Ltd., 701 Hibernia Bank Building, New Orleans, La., wants prices on steel for aerial railway and tower. (See "Building Materials.")

Tank.—Ford Roofing Co., Greensboro, N. C., wants a cheap iron boiler to boil pitch in.

Umbrella-factory Supplies.—H. C. Graham, 709 East Market street, Louisville, Ky., wants addresses of manufacturers of umbrella handles; also of rods and material for making umbrellas, including pearl workers, gold and silver manufacturers and mounters, horn workers and importers, manufacturers and importers of rubber, wood and metal.

Varnishes.—Benito Sarabia, Apartado 130, Mazatlan, Sinaloa, Mexico, wants to correspond with manufacturers of varnishes relative to securing agency.

Wash-borings.—Sealed proposals addressed to the Board of Awards, Baltimore, Md., will be received until June 20 at the office of Harry F. Hooper, city register, City Hall, for making wash-borings upon the lines of the proposed sewer routes. Specifications may be obtained from office of Sewerage Commission, 904 American Building, Baltimore, Md.; Peter Leary, Jr., chairman.

Water System.—County Commissioners will

let contract June 18 at public outcry at the courthouse, Walhalla, S. C., to lowest responsible bidder for installation of pump and gasoline engine at county jail; also repairing of water supply system throughout jail. Plans and specifications on file in office of county commissioners. Usual rights reserved. Address F. A. H. Schroder, clerk, Walhalla, S. C.

Water-works.—City of Whitesboro, Texas, John Marshall, mayor, will open bids June 21 for furnishing material and building a system of water-works. Plans and specifications on file in office of city secretary, also at office of M. P. Kelley, Gainesville, Texas. Certified check for 3 per cent. of amount of bid must accompany each bid.

Water-works.—L. C. de Van, 336 Randolph Building, Memphis, Tenn., wants catalogues on water plants.

Water-works, etc.—Water and Sewer Commission, Laurinburg, N. C., will receive bids until July 7 for constructing water-works and sewerage system. Extract of proposed works as follows: For water system, 4.5 miles of pipe of sizes 12, 10, 8, 6 and 4 inches; for 4.01 miles of sewer pipe of 15, 12, 10 and 8 inches, 52 M. H. and 3 F. T. For specifications, forms of proposals, etc., address commission. F. L. Bundy is mayor; J. M. Bandy, Greensboro, N. C., engineer.

Water-works Equipment.—J. M. Bandy, Greensboro, N. C., wants prices on water and sewer pipe, deep-well pumps, fixtures and borings.

Water-works Equipment.—Holden Real Estate Co., Sanford, Fla., wants addresses of manufacturers of water-works equipment.

Wire.—H. Eugene Fantl, R. F. D. No. 3, Seneca, S. C., is in the market to bid on large lots of scrap copper wire, burned and unburned.

Wood-alcohol Plant.—J. A. Kelly, Jasper, Texas, wants bids on complete plant for manufacture of wood alcohol.

Wood Drums.—See "Drums."

Woodworking Machinery.—Elkins Refrigerator & Fixture Co., Wm. M. McBride, superintendent, Elkins, W. Va., wants complete equipment of woodworking machinery for manufacture of refrigerators, butchers', grocers' and other store fixtures and all kinds of interior woodwork.

Woodworking Machinery.—J. W. Miner, Ronda, N. C., wants quotations on rod and dowel machine for making 7-16" hardwood dowels in quantities; new or second-hand.

Woodworking Machinery.—Ronda Coop & Egg Case Co., Ronda, N. C., wants quotations on two-side flagstick machine for making round dowels; second-hand preferred.

Woodworking Machinery.—S. A. Lewis, Latta, S. C., wants machinery for manufacturing sash, doors and blinds. (See "Machine-works Equipment.") W. J. Montgomery, Marion, S. C., was mentioned last week as to be addressed regarding this equipment.

INDUSTRIAL NEWS OF INTEREST

Saw-Milling Plant.

A complete saw-milling plant is offered for sale by George H. Bigel of Ponchatoula, La. It includes power equipment and various machines. (For detailed list see advertisement.)

A Business Opportunity.

An opportunity for investment in a manufacturing proposition in the Birmingham district is presented in an enterprise requiring additional working capital of \$15,000 or \$20,000. For information address Box 333, Birmingham, Ala.

Big Contract for Grading.

A big contract for grading was awarded last week to the Propst Construction Co. of Charlotte, N. C. It involves the work of grading for 21 miles of macadam road in Gaston county, North Carolina, and is an evidence of the character of work the Propst Company is handling.

Engines for Standard Oil Co.

The Standard Oil Co. has ordered two "Hornby-Akroyd" oil engines of 25 horsepower each, which will be shipped to Chin-kang, China, and used for pumping purposes. These engines are supplied by the De La Vergne Machine Co. of New York, which says that the use of oil engines has increased enormously in the past few years, there being now over 14,000 oil engines of the "Hornby-Akroyd" make alone in operation.

A Business Opportunity.

An offer at present being made should prove attractive to some energetic man with capital. A Southern man has some inventions which he is not prepared to handle

properly, and wants to have the devices patented and introduced. To an energetic man who will furnish the capital a half-interest in the patents will be assigned. Full investigations are to be made by each party to the contract. Information can be obtained by addressing Lock Box 247, Marion, Va.

Voltax for Conduit System.

The Electric Cable Co. of Bridgeport, Conn., has just installed an underground conduit system for the American Railways Co. at Altoona, Pa. This conduit system was laid in wooden trenches in which the wires were embedded in Voltax, the new insulating compound which is being extensively adopted by the railway companies throughout the country. The American Railways Co. has found this system so effective that it has recently placed large orders with the Electric Cable Co. for further work.

Buying More Hayden Machines.

The Art Concrete & Construction Co. of Evergreen, Long Island, has recently added two more Hayden automatic concrete machines to its equipment. It is doing an extensive business in the manufacture and sale of concrete blocks, and the recent enlargement of its plant, including the addition of two of the 1906 model Hayden block machines, indicates the extent of the growth of the cement industry in this section. The Hayden Automatic Block Machine Co. of 26 Cortlandt street, New York, manufactures the Hayden machines.

New Generators for Plant.

The Crawford (Neb.) Electric Light Plant has recently ordered from the Crocker-

Wheeler Company of Ampere, N. J., two alternating-current generators of 120 and 60 KVA, respectively; both generators of 2300 volts. This increased capacity is for lighting the city streets, etc., in addition to present equipment. The Crocker-Wheeler Company also has contract to furnish a 50-kilowatt, 2300-volt belt-type alternator to be driven by water-power for the Pea River Power Co. of Elba, Ala., and a 750-kilowatt, 2300-volt, 200 R. P. M. alternating-current generator for the Roanoke Rapids Power Co. of Roanoke Rapids, N. C.

Hicks Locomotive and Car Works.

Messrs. F. M. Hicks & Co. of Chicago announce that they have been succeeded by the Hicks Locomotive and Car Works, Incorporated for this purpose. The new company will continue to deal largely in railway equipment and supplies, rebuilding to good operating condition the locomotives, coaches, freight cars and other rolling stock and the materials it offers for sale. Increased capital and enlarged facilities will enable the company to give even better satisfaction to buyers than heretofore. Officers of the new company are: President, F. M. Hicks; vice-president, Elliott C. Smith; treasurer, William McInnes, and assistant treasurer, E. Hope Norton.

Some Dodge & Day Work.

Messrs. Dodge & Day, engineers, of Philadelphia, have completed plans for the new works of the Arthur Koppel Company of New York and Berlin, Germany. Construction will be started at once, and the plans contemplate the erection of a section of the erection shop and the light-car shop, the switch shop, service building and office building, and a part of the power plant. The works are situated at Homewood, about 35 miles from Pittsburgh, and will make many of the products which have hitherto been imported by the Arthur Koppel Company from Germany. Mr. H. A. Ellis will have charge of the new plant. He has established an office at 1771 Frick Building Annex, Pittsburgh, Pa.

Oil Mill and Ginning Plant for Sale.

An opportunity for investment in a Southern cotton-oil-mill property and ginning plant is presented in the announcement that a property of this character is offered for sale. The property is that of the Red Springs Oil & Fertilizer Co. It consists of a brick main building, 800-ton seedhouse, ginnery with three 70-saw Munger system, two boilers of 150 horse-power, Murray Corliss engine, Atlas engine, Westinghouse electric-light plant, Carver gin-saw sharpener, D. A. Tompkins huller, linter press, necessary elevators, conveyors, linters, Cardwell hydraulic pump, two Smith-Vale heaters and other equipment. The plant is on the Atlantic Coast Line Railroad and the Red Springs & Bowmore Railroad. For information address A. B. Pearall, president of company, Red Springs, N. C.

Sawyer-Fulford Revolving Scales and Sacking Machine.

Progressive managers of oil mills and fertilizer factories who are not acquainted with the features of the Sawyer-Fulford revolving scales and sacking machine should not fail to investigate the invention. The machine is especially designed for plants of the character named and is being successfully used by some of the most exacting companies in the South. It weighs and sacks, inspects and adjusts, is entirely accurate, attends to two different-sized packages at one time, and is a general saver of time, labor and material. A correspondent of the Manufacturers' Record recently referred to the machine in a complimentary way, but he had the name slightly inaccurate. Messrs. W. H. Sawyer & Sons of Americus, Ga., are the manufacturers of the Sawyer-Fulford equipment.

To Manufacture Christensen Air-Brakes.

In view of the growing demand for air-brake equipment for all classes of cars, the announcement that the Allis-Chalmers Company of Milwaukee, Wis., has purchased the exclusive right to manufacture and sell the Christensen air brake and air compressor is interesting as adding another important specialty to this company's lines of manufacture. The air brake referred to is the invention of Niels A. Christensen, and has met with much success. The result of this new acquisition is that one of the Allis-Chalmers shops is being fitted with a mechanical plant of original design for the construction of the brake and compressors. It is stated that within the next few months 800 or 900 additional mechanics will be required in this branch of the industry. Mr. Christensen joins the Allis-Chalmers Company as consulting engineer.

Standard Cordage Resumes.

After a shutdown of several months, the plants of the Standard Cordage Co. (formerly owned by Standard Rope & Twine Co.) have resumed operations. The spindles of the Sewall & Day Mills, the Standard's big plant in Boston, and the Waterbury Mills, in Brooklyn, are in operation. The company's machinery in the several plants has been thoroughly overhauled and a number of improvements have been effected. The officers of the Standard Cordage Co. express themselves as exceedingly encouraged over the outlook for future business. It was the company's intention to commence only with the Sewall & Day Mills, but the number of orders already on hand are of sufficient volume to warrant the opening of the Waterbury plant also. President Charles Wilson and Vice-President Edward C. Butler of the Standard Cordage Co., for many years connected with the Flitter Cordage Co. of Philadelphia, are said to be thoroughly familiar with all branches of the cordage trade.

Enterprising Wire Manufacturers.

As the class of buildings and other structures which require brass and steel wirework of every description is steadily increasing in number, making the demand for work of this kind more active, there is a general inclination among manufacturers of these fixtures to meet the growing demand by paying particular attention to the needs and fancies of the trade. Among manufacturers who have paid particular attention to these details may be mentioned Messrs. Dufur, Baggott & Co., 513 West German street, Baltimore, Md. The satisfactory manner in which this firm executes its contracts is attested by the fact that its trade is expanding and important contracts are being constantly filled, and among a number of other orders which it has recently received is a large one from Washington, D. C. Messrs. Dufur, Baggott & Co. manufacture brass and steel wirework of every kind, including bank work, elevator enclosures, elevator cabs, counter railings, grills, wickets, guards, partitions, skylight protectors, etc.

As to Draft Apparatus.

The experiences of the recent earthquake have emphasized in a most forcible manner the marked advantages of the short steel stack, which is all that is essential with a mechanical-draft installation. Chimneys of the usual sort have everywhere proved to be immediate sources of danger. Their wrecking on all sorts of buildings in the stricken region was no inconsiderable factor in the general destruction at San Francisco. Most of the power stations around San Francisco came through in pretty fair shape save for the stacks, thanks to the fact that most of the plants were fairly well built and did not carry their weights too high. After this experience tall chimneys may be counted on as pretty certain to go in a severe earthquake. On the other hand, there is considerable to be said for short stacks and forced or induced draft. This construction, which has entered into recent equipment in Japan, suggests still another of the advantages of this modern system of draft production. The B. F. Sturtevant Company of Boston, Mass., can furnish interesting facts as to draft apparatus.

The Rome Brick Co.

That there is at present a big demand throughout the South for building bricks is known to the trade generally, the consumption of this product being extensive because of the activity prevailing in the erection of all kinds of structures. While this demand has increased greatly during the past several years, it has always been large, and one of the first enterprises to cater to the market was the Rome Brick Co. of Rome, Ga. This company was formed and established a plant in 1877, its organizers including R. B. Morrison, who earned fame in the brick-making world by inventing the Morrison up-draft kiln. The plant of the Rome Brick Co. is entirely modern in its equipment for manufacturing. Its capacity is 60,000 common bricks and 15,000 dry-pressed bricks daily, this product being readily taken by building contractors and construction workers throughout the South. Ample clay deposits are controlled, and increased demands for bricks are being met from time to time. The Rome Brick Co.'s officers are: J. W. Rounsville, president; E. T. McGhee, vice-president; J. Glover McGhee, general manager; J. R. Rounsville, secretary and treasurer, and T. R. Davis, superintendent.

Some Crocker-Wheeler Orders.

The following orders have been received by the Crocker-Wheeler Company of Ampere, N. J.: Three 130-kilowatt 230-volt gas-engine-driven generators for the Garford Company, Elyria, Ohio; Floyd-Wells Company, Royers-

ford, Pa., 100-kilowatt 230-volt and three motors of 35, 25 and 20 horse-power, respectively, and two motors of 10 horse-power each, all of 230 volts; M. S. Brown Electric Co., Columbus, Ohio, one 60-kilowatt 230-volt D. C. generator, and motors of 5, 7½, 12 and 15 horse-power, all of 230 volts; World-Star Knitting Co., Pay City, Mich., one 75-kilowatt A. C. generator, also one 4½-horse-power 125-volt motor; two generators of 425 kilowatts and 225 kilowatts, respectively, also two motors of 100 horse-power, one of 50 horse-power and one of 25 horse-power, for Lehigh Portland Cement Co., Ormrod, Pa.; three 75-kilowatt 230-volt generators for Joseph MacWilliams & Co., Memphis, Tenn.; three one-horse-power motors for Wellman-Seaver-Morgan Company, Cleveland, Ohio; American Woodworking Machinery Co., Rochester, N. Y., 200-kilowatt 230-volt direct-current generator, and American Fork & Hoe Co., Ashtabula, Ohio, two 75-kilowatt 240-volt generators to furnish power to drive tools throughout plant.

The Southern Colonizing Co.

Plans for colonizing lands throughout the South have been showing considerable activity during the past year. There are great areas of land in the South awaiting colonization and development, and the movements to promote such activities are worthy of success. Recently there has been organized for colonization purposes the Southern Colonizing Co., with offices at 16 and 18 Exchange Place, New York city. This company states that it will sell lands on easy payments in lots of 10, 20, 40 and 80 acres or more, and has agents throughout the Eastern and Western States and in Canada, and is arranging to be represented throughout Europe. It is planned to market lands that are of such character as to soil and climate that agriculture can at once be begun by the purchasers, whom the colonizing company will endeavor to have, as far as possible, practical farmers looking for new and better locations for homes. The Southern Colonization Co. has the following officers: President, George B. Edwards, a Southerner conversant with Southern conditions, Charleston, S. C.; secretary, Alexie Le Blanc, formerly of Chatawa, Miss., experienced as a Southern planter and lumberman, but now of New York city, and vice-president and general manager, Charles H. Crossley of New York city.

Improved Farm and Builders' Levels.

Attesting the popularity and efficiency of Bostrom's improved farm and builders' levels, the manufacturer is daily receiving testimonial letters from all parts of this country and other countries commending the universal adaptability of the instrument for work anywhere and everywhere. The Bostrom-Brady Manufacturing Co., 31½ West Alabama street, Atlanta, Ga., manufactures these levels, and has recently received a letter from a purchaser at Bolyue, Col., stating that he had used the instrument in irrigation work, including ditching and the construction of a concrete cofferdam, as well as for laying out town lots, etc., and had found it most accurate and satisfactory. The company has also received letters from purchasers at Longmont, Col.; Greeley, Col.; Highmore, S. D.; Woredale, Wyo.; Glenwood Springs, Col.; Toronto, Canada; West Point, Ga., and other places testifying to the satisfactory service obtained from the use of these levels for various kinds of work. A correspondent writes from Carlsbad, Mexico, making inquiries with reference to purchasing a Bostrom improved level for taking elevations on a tract of land where the use of an engineer's Y level would be an unnecessary expense. Recent orders for levels have been filled from Tlalocatlapan, Vera Cruz, Mexico; Winnipeg, Canada; San Diego, Cal., and Savannah, Ga.

Uncle Sam Protects Albany Grease.

The makers of Albany Grease say: "After nearly 40 years Albany Grease rightly comes into its own and takes its indisputable place alongside of the registered 'boy on the plank,' made so familiar by Adam Cook's Sons to every user of a first-class lubricant. Under the old trade-mark law the word 'Albany,' being a geographical name, could not be registered. The new law passed February 20, 1905, has changed this, and now affords protection to concerns who have put the names of such cities as Albany, Milwaukee, St. Louis and Manhattan into the mouth of every man to feed on in his daily conversation. Every engineer associates the geographical name 'Albany' with the first lubricating grease ever put on the market, and Albany Grease still remains to him the first in every respect—first in its economy and cleanliness, first in its lubricating qualities, first to help an engineer out of his hot-box troubles, and first all along the line in its lasting qualities." Messrs. Adam Cook's Sons of New York, the only makers of Al-

bany Grease, by persistent advertising, have made the name "Albany" famous, and by furnishing a lubricant of matchless merit maintain an enviable reputation. The name "Albany" in connection with grease is now the sole property of Adam Cook's Sons, being duly registered in the United States Patent Office.

Using Feed-Water Regulators.

The use of safety feed-water regulators in power-plant practice is becoming the rule instead of the exception, and engineers are beginning to appreciate their value as economy and efficiency producers. The Williams Gauge Co., which manufactures a safety feed-water regulator, announces a few of its recent sales, together with the horse-power, below: Illinois Central Railroad, 1200 horse-power; Delaware, Lackawanna & Western Railroad, 25,000 horse-power; Republic Iron & Steel Co., 15,000 horse-power; Tennessee Coal, Iron & Railroad Co., 10,000 horse-power; Pennsylvania Coal Co., 7000 horse-power; American Car & Foundry Co., 9000 horse-power; Morgan Engineering Co., 2000 horse-power; Westinghouse Electric & Manufacturing Co., 2000 horse-power; New York Central & Hudson River Railroad, 3000 horse-power; Pullman Palace Car Co., 2000 horse-power; Illinois Steel Co., 4000 horse-power; Carnegie Steel Co., 3000 horse-power; Crucible Steel Co., 4000 horse-power; Boston & Maine Railroad, 1200 horse-power. This makes total boilers equipped to date with the Williams safety feed-water regulators aggregate 4,100,000 horse-power regulators manufactured at the company's shop in Pittsburg, Pa. The Williams Gauge Co. has opened an office at Montreal, in charge of Wm. M. Courtenay, this being the third office in the Dominion of Canada now operated by this company.

The Meade Metal Windows.

An objection said to have been brought against metal windows is that if they are loose enough to operate freely they are not weatherproof, and if tight enough to be weatherproof will not operate readily. This objection has recently been given attention by the Meade Roofing & Cornice Co. of Philadelphia, Pa., and is said to be overcome by the peculiar fitting of the frames and sash at points where the jamb and sash come in contact in a metal window which the company is now introducing. A large plant has been erected for manufacturing this window and fireproof doors, and the same time the company will maintain its previous reputation as a tile and slate roofer. The Meade Company states that its metal windows are approved by the National Association of Fire Underwriters and by leading architects, and that it also controls the Smith-Warren patent automatic-closing device for windows, the device being both practical and positive and a necessity in securing absolute fire protection. For some years the Meade Roofing & Cornice Co. has been known for its roofing work, contracts having been undertaken and completed throughout the country from Maine to Florida. Its roofing tile is a line entirely distinct from slate work, and in both branches the company has earned an enviable reputation, keeping a large force of experienced men constantly busy in this work.

Recent Triumph Ice Machine Sales.

Besides hundreds of orders for Triumph specialties, such as ammonia fittings, supplies, etc., the Triumph Ice Machine Co. of Cincinnati, Ohio, has recently sold the following: Fourth National Bank, Cincinnati, 6-ton ice-water plant; American Brewing Co., Indianapolis, 65-ton refrigerating plant; Andres Norlega, Linares, Mexico, 3-ton ice plant; Crescent Brewing Co., Tarr, Pa., 25-ton ice plant; Pearce & Foster, Maysville, Ky., 10-ton ice machine; Fireproof Storage Co., Cincinnati, 14-ton refrigerating plant for fur storage; Brennenman Baking Co., Columbus, Ohio, 10-ton refrigerating plant for bread bakery; Sinton Hotel, Cincinnati, 35-ton refrigerating plant; R. J. G. McComiskey, Abbeville, La., 10-ton ice-making plant; Madisonville (La.) Ice Manufacturing & Cold Storage Co., 5-ton ice plant; Terre Haute (Ind.) Abattoir & Stock Yards Co., 28-ton refrigerating plant; Washington Brewing Co., Columbus, Ohio, 50-ton refrigerating plant; Weidemann Brewing Co., 6-ton refrigerating plant for Louisville warehouse; Cincinnati (Ohio) Ice Co., 65-ton ice plant; A. G. Schnitzer, Palmyra, Mo., 10-ton ice plant; Telluride Power Co., Provo, Utah, 2-ton refrigerating plant; T. H. Bassett & Co., Baltimore, Md., 6-ton refrigerating plant; Burkhardt & Co., Cincinnati, 7-ton refrigerating plant for oil cooling; Harry Wood, Madisonville, Ohio, 15-ton refrigerating plant; Sharpless & Co., Rising Sun, Md., 10-ton refrigerating plant; Busy Bee Candy Kitchen Co., Columbus, Ohio, 30-ton refrigerating and ice plant, and J. W. Hooker & Co., Claremore, Pa., 10-ton refrigerating plant.

Butler Bros. in Baltimore.

Recognizing the many advantages which Baltimore possesses as a central point for reaching the business men of the South, Butler Bros., the well-known jobbers of all kinds of department-store goods, have decided to establish a branch in that city. A five-story building, 48x77 feet, has been leased and is now rapidly being prepared for its opening, which will be on July 1. This branch will not carry stock for shipment, but will be devoted entirely to the display of samples, of which there will be about 42,000, covering every line that is handled by department and general stores. The territory to be covered by this branch will include Delaware, Maryland, Virginia, West Virginia, Tennessee, North Carolina, South Carolina, Georgia and Florida. Mr. F. M. Scoggins will be the manager in charge. All goods for this territory will be shipped from the distributing warehouse in Jersey City, which covers about 600,000 square feet. It is also the intention of Butler Bros. to open on July 1 another branch in Dallas, Texas, which will cover the Southwestern territory. This company does not keep salesmen on the road, but sells entirely by catalogues, which are issued monthly. These catalogues are complete in every detail and fully cover the following principal lines: Hardware, tinware, woodenware, foreign and domestic china, dry goods and notions, imported and domestic toys, Japanese goods, stationery, clothing, cutlery and jewelry. Butler Bros. was organized in 1877, and now has branch houses in New York, Chicago, St. Louis and Minneapolis. The principal officers are: Edward B. Butler, president; Homer P. Knapp, vice-president; Walter Scott, secretary, and John R. Schofield, treasurer.

Recent Sprout-Waldron Sales.

Reports from the flour-milling industry throughout the country are favorable, many new mills being in course of construction and many being enlarged and improved. The manufacturers of mechanical equipment used in these plants are therefore obtaining many orders for machinery. Among these manufacturers are Messrs. Sprout, Waldron & Co. of Muncey, Pa. This firm has recently received many contracts from Southern buyers, including a 40-barrel mill for Maben (N. C.) Milling Co.; 40-barrel mill for F. R. Martin, Limestone, Tenn.; 50-barrel mill for Shuford & Ritchey, Newton, N. C.; 30-barrel mill for John W. Nelson, Sugar Grove, Va.; 40-barrel mill for R. W. George, Francisco, N. C., this being the fourth contract for complete mills received from Mr. George. These mills are all on the Monarch system, which Messrs. Sprout, Waldron & Co. build. Some other recent contracts are a 25-barrel mill for Georgetown (Del.) Roller Mills Co.; 40-barrel mill for W. H. Scott, Goodwins Ferry, Va.; 40-barrel mill for John Lovell, Bybee, Tenn.; three-stand mill for J. H. Blevins, Decatur, Tenn.; 25-barrel mill for Frank Gates, Charlottetown, Canada; remodeling 150-barrel mill for Sabina (Ohio) Flour Mill Co.; remodeling 40-barrel mill for T. L. Finger, Lincoln, Tenn.; remodeling 75-barrel mill for Rhine, Woodward & Co., Newton, N. C.; remodeling 300-barrel mill for Martin Bros. Milling Co., Sioux City, Iowa; remodeling mill for C. B. Lemert, Clarksburg, Ind.; remodeling 50-barrel mill for J. L. Morgan, Clyde, N. C.; three-stand mill for M. P. & L. G. Groft, Chambersville, Pa.; remodeling mill for Brodie & Thompson, New Holland, Ohio; remodeling mill for A. B. Stall, Moscow Mills, Md.; remodeling 75-barrel mill for A. L. Cain, Ontario, Ind.; remodeling 75-barrel mill for Rechsteiner-Brown Company, Lowell, Ohio; remodeling 40-barrel mill for Grendin, Squires & Williams, Thornfield, Mo.; remodeling 100-barrel mill for E. Wesley Bros., Lebanon, Ohio; remodeling 600-barrel mill for A. E. Barry, New Middleton, Tenn., and many others. These remodeling contracts change these various mills to the Monarch system. Besides these contracts, Messrs. Sprout, Waldron & Co. have made many sales in all parts of the country of rolls, reels, sifters, recylcing separators, feed governors, sieve bolters and other machinery of the Monarch system.

TRADE LITERATURE.**Galvanized Hoop and Bar Iron.**

The United Galvanizing Co., 525-529 North Front street and 520-532 Beach street, Philadelphia, Pa., is circulating a folder which contains a list of products carried in stock by this company, together with specifications, conveniently arranged. Among the articles enumerated are angles, channels, half-ovals, hoop iron, bar iron, bands, flat bars, boat spikes, malleable clinch rings, chains and anchors, etc., all of galvanized iron.

Industrial Power Plants.

The power plant, which is one of the most important elements of an industrial estab-

lishment, is illustrated and described in some detail by Pamphlet No. 16, one of a series covering recent work of Messrs. Dodge & Day, engineers for the construction of complete manufacturing plants, Drexel Building, Philadelphia, Pa. The pamphlet referred to contains illustrations of different types of apparatus in each case, which is intended to show the wide choice that is possible in the selection of power-plant equipment.

Marsh Steam Pumps.

Catalogue No. 14, illustrating and describing in detail the Marsh steam pumps, is being distributed to the trade and steam users generally by the American Steam Pump Co. of Battle Creek, Mich. The lists and detail tables as contained in the catalogue have been arranged with care and in convenient form for reference and comparison, showing that the various kinds of pumps manufactured by this company cover sizes and combinations to meet ordinary requirements. The American Steam Pump Co. manufactures standard boiler-feed pumps, tank and vacuum pumps, air compressors, deep-well pumping engines, etc., and will specify for general or particular service when desired.

Emery and Corundum Grinding Machines.

An illustrated catalogue and price-list of emery-grinding machines, corundum wheels, polishers' supplies and machinery, etc., is being distributed to the trade by the L. Best Company, 45 Vesey street, New York City. This company was established in 1882, and carries a large stock of the supplies referred to, such as rub-stones, combination corundum bricks, emery-wheel machines of different kinds, patent iron grindstone frames, drill grinders, saw sharpeners, diamond tools, etc. Its products are in large demand, and this demand is increasing steadily because of new buyers becoming acquainted with the merits of L. Best polishing and grinding equipments.

Cyclopean Iron Works Co.

In an effort to meet the growing demand for a practical bottom-dumping bucket for the rapid and economical handling of concrete and other materials, especially where large and massive concrete masonry is specified, the Cyclopean Iron Works Co., office and works 402-404 Claremont avenue, Jersey City, N. J., claims to have added improvements to its product where experience demonstrated they could be improved. Forgings have been substituted where castings were generally used, and heavier and better material is now being used in the construction of the bucket. The company is distributing an illustrated and detailed catalogue concerning its manufactures, which includes dump buckets and boxes, lead-melting furnaces, smokestacks, etc.

Modern Fiber Machinery.

As a result of experience it is known that the grower must have simple, durable and rigid machinery to successfully and profitably clean and extract the fiber from the leaves of the numerous plants of the agave species. With this end in view, the Finigan-Zabriskie Company of Paterson, N. J., claims that it has perfected machinery which will clean and produce a greater quantity of marketable fiber in a given time, requiring less power to do it, while its machines can be operated at a very low cost to growers and producers of cordage fibers. The Finigan-Zabriskie Company designs machinery for the manufacture of sisal, hemp, jute, rope, oakum, bagging and for special purposes. It issues an illustrated pamphlet telling about its equipments.

Vapor Lamp for Industrial Lighting.

The mercury-vapor lamp invented by Peter Cooper Hewitt of New York as the outcome of a long study of electrical vacuum phenomena is now recognized as an efficient illuminant, and has come into wide commercial prominence in many interesting and important installations in the field of industrial lighting. The lamp consists of a glass vacuum tube 1 inch in diameter and from 17½ to 45 inches long in the standard type, in which mercury vapor is excited to a high degree of incandescence by the passage of the electric current. Detailed information concerning the lamp outfit and illustrations showing its installation in industrial plants are presented in Publication No. 12 for May, 1906, issued by the Cooper Hewitt Electric Co. of New York.

American Ship Windlass Co. Products.

Shipowners who want to be informed regarding the most improved devices for facilitating the operations of their vessels should not fail to investigate the products of the American Ship Windlass Co., which have become known for their superiority through-

out America and in other countries of the world. The product includes the "Providence" yacht windlasses, capstans, centerboard and mast winches, main-sheet capstans, stockless and mushroom anchors, mooring bits and gypsy windlasses. In circular No. 10, which the company issues, is presented illustrations and descriptions of these machines for the benefit of people who may be in the market for devices of this character. Write the company's offices at Providence, R. I., for a copy of the pamphlet.

"Ideal" Concrete Machines.

A book of views showing different departments in its manufacturing plant and offices, as well as the different stages through which its machines pass in the course of their construction, is presented by the Ideal Concrete Machinery Co. of South Bend, Ind. This company has been manufacturing concrete machines for several years, and has recently removed its plant from Auburn to South Bend. A recent addition to its production is the manufacture of its "Ideal Special," which is now on the market. This machine is the newest invention of Mr. Borst, the president of the company, and, it is claimed, will produce all sizes of large stones, such as sills, lintels, steps, water-tables, etc. The machine is adjustable to an extreme length of 60 inches, a width of 18 inches and a height of 8 inches.

Locomotive Crane Outfits.

Locomotive cranes can be used advantageously for a great variety of work. They are now in position in manufacturing plants, iron and steel works, foundries and machine shops, quarries and stoneyards, and many other establishments. For rapid and economic handling of materials the locomotive crane, with its accompanying buckets and tubs, is extensively called for, and manufacturers of this class of equipment find the demand steadily increasing. The Wellman-Seaver-Morgan Company of Cleveland, Ohio, designs and manufactures locomotive cranes, buckets and tubs which have received the approbation of some of the most exacting users throughout the country, and its products of this class are illustrated and described in a special pamphlet which is now ready for inquirers.

A Perfect Smithing Coal.

These are days when results count. In presenting some of the advantages gained by using its George's Creek Cumberland smithing coal, the Consolidation Coal Co., main offices Continental Trust Building, Baltimore, Md., has issued a pamphlet entitled "A Perfect Smithing Coal." This publication contains interesting information concerning this product and enumerates some results from the use of it. It is claimed that the coal reduces the cost of manufacture by its maximum heat-producing power, its low sulphur and ash. It is said to coke promptly in the forge, forming a strong, hard coke which permits the formation of a very large arch sufficient to cover work of any size which can be reasonably handled on the anvil. The company is well equipped for supplying this coal to all points, as its transportation facilities are excellent.

Gardner Improved Disc Grinders, etc.

Gardner's improved disc grinders, band polishing wheels, disc-wheel circles and sectional wheel chucks are illustrated and described in a pamphlet now being distributed. These machines have earned an enviable reputation for their factors of efficiency and economy in many of the most important manufacturing establishments, and have been adopted by some of the most exacting users of the class of machinery to which they belong. In designing the improved machines consideration has been given to abrasive grains—i. e., emery, etc.—as extra high-speed tools, and there has been provided an abundance of weight, rigidity and driving power. The claim for these tools is stability, simplicity, accuracy, convenience, greater efficiency and increased output. These tools are manufactured by the well-known Gardner Machine Co. of Beloit, Wis.

Reinforced Concrete Pipe.

The uses for which reinforced concrete are now being employed include the manufacture of sewers, conduits, railroad culverts, water pipes, etc. In presenting its first catalogue the Reinforced Concrete Pipe Co. of Jackson, Mich., successor to the Jackson Cement Sewer Pipe Co., claims that its reinforced concrete sewer pipe makes a sewer structure absolutely free from leakage or seepage, while contamination of soil from leaking sewers is an impossibility. In its manufacture each pipe section is reinforced individually, and the simplicity of the method of manufacture is claimed to be its guarantee of results in properly-handled concrete and properly-lodged reinforcing. The catalogue to which refer-

ence is made contains interesting data regarding the construction and laying of reinforced concrete pipe and illustrations showing some instances in which this company's product has been used.

Spencer & Hall Company's Specimen Book.

Users of type, printers' supplies and machinery will doubtless be interested in the announcement that the Spencer & Hall Company, type founders and electrotypers, Baltimore, Md., has ready for distribution its complete specimen book of type, brass rule, borders, leads, slugs, cases, stands, cabinets and all printers' supplies. This company claims to be in a position to save the purchaser money from the fact that it is not connected with any trust or combination, and furnishes its supplies direct from the foundry. It says it has the only type foundry in the South manufacturing type, spaces and quads. Particular attention is paid to the sale, purchase and exchange of printing presses, paper cutters, etc. The specimen book referred to above is intended for free distribution, and the Spencer & Hall Company will supply copies to those who request them.

Modern Automatic Refrigeration.

Ever since the time, and before, when the Greeks began the worship of the cold North Wind Boreas, who, mythology states, was the son of the beautiful Aurora, man has had to deal with problems involving heat and cold. The production of cold by mechanical means has now become such a well-known process that we seldom stop to think of the vast amount of ice frozen annually in our great ice plants or the amount of beer and ale cooled in our breweries, or the meat chilled in the spacious coolers of the great packing-houses. The requirements of these and other industries have made possible the high state of perfection to which refrigerating systems of today have attained. In a pamphlet on automatic refrigeration which is being distributed by the Automatic Refrigerating Co. of Hartford, Conn., there is presented some timely and interesting data concerning this company's system of refrigeration, together with illustrations and specifications showing the installation of several cooling plants as installed by the company.

Norfolk as a Manufacturing Center.

The advantages offered for the location of industrial enterprises on the electric division of the Norfolk & Southern Railroad are advanced in the pamphlet, "Norfolk as a Manufacturing Center," which is being distributed by the land and industrial department of the railroad referred to. This division extends from Norfolk to Cape Henry and Virginia Beach, forming a belt line of about 40 miles, and it is stated that factory sites are offered at reasonable prices. Passenger trains on the electric division run on half-hour schedule, which is said to make it easy at all times to draw from Norfolk and suburbs a supply of competent help without the expense of providing homes for them in the vicinity of the factory. Among the factors essential in a successful industrial district, and which are said to be supplied on this division, are the reasonable cost of site, supply of labor, cheap power and fuel, nearness to market, transportation facilities, nearness to raw material, favorable freight rates, climate, etc. Any information desired will be furnished by F. L. Merritt, land and industrial agent Norfolk & Southern Railroad Co., Norfolk, Va.

Chattanooga Paint Co.'s Folder.

On a folder which it is distributing the Chattanooga Paint Co. of Chattanooga, Tenn., calls attention to the several products of its manufacture. Among these are the "Eclipse Mortar Colors," which it claims to be very strong and economical. In mixing its mortar colors the company states that no especial skill is required, the first step being to mix the colors with the dry sand, then adding the cold-slaked lime and again mixing thoroughly. The more thorough the mixing the less color is required and the cheaper it is for the consumer. It is important that the color be uniformly mixed. Attention is also directed to the grade of red oxide of iron paint which this company manufactures, the claim being made for it that it is a superior mixture for tin, iron or shingle roofs, railroad cars, bridges, barns, fences, outbuildings, etc. It is recommended for use in any place where protection from the weather is desired, and is said to be extensively used by many large carriage and wagon manufacturers and paint grinders in the United States. The Chattanooga Paint Co. is making a specialty of manufacturing a coloring for sand-lime brick and cement blocks, and is receiving and filling orders for this product and others of its manufacture to all parts of the country from Florida to California.

FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,

Baltimore, Md., June 13.

In the Baltimore stock market during the past week United Railways incomes advanced and became firmer. There was also a rise in Consolidated Cotton Duck, common and preferred stock, and the Cotton Duck 5 per cent. bonds continued firm.

In the trading United Railways common sold at 16½ to 16¾; the trust certificates at 16½ to 16¾; the incomes from 72% to 74%; the trust certificates from 71% to 72%; and the 4s from 92½ to 92¾. Consolidated Gas was traded in at 82 to 83; Gas 6s at 107 to 107½, and the 4½s at 98½ to 98¾. Seaboard new common changed hands at 31 and 31½; the second preferred at 60½ to 60; the 4s from 88½ to 88¾, and the 5s at 101% to 101½; Cotton Duck 5s from 86% to 87½; Consolidated Cotton Duck common from 12% to 13½, and the preferred from 34 to 36½; G.-B.-S. common, 10½; the incomes from 39 to 39½, and the 1sts at 63 to 63½.

Marine Bank sold at 39 to 39½; Mercantile Trust, 145; American Bonding, 50; Maryland Casualty, 55 to 55½; Howard Bank, 12½.

Other securities were traded in as follows: Maryland & Pennsylvania, 29 to 30; do. incomes, 71 to 67%; do. 4s, 94½; do. Terminal 5s, 103½ to 104½; Georgia Southern & Florida first preferred, 98½; do. 5s, 113; Georgia & Alabama 5s, 112; Charleston Consolidated Electric 5s, 95½ to 95½; Norfolk Railway & Light 5s, 99 to 99½; Northern Central Railway stock, 100½ to 90%; George's Creek coal, 80; Atlantic Coast Line 4s, 100 to 100½; do. new 4s, certificates, 92; do. Connecticut full-paid warrants, 347½; do. do. 4s, certificates, 5-20s, 92; Georgia, Carolina & Northern 5s, 111½; Macon Railway & Light 5s, 101; Baltimore, Sparrows Point & Chesapeake 4½s, 97½; Western Maryland 4s, 86½ to 87; Baltimore Brick common, 8; Houston Oil common, 8%; Anacostia & Potomac 5s, 106; Atlanta Consolidated Street Railway 5s, 106½; Charlotte, Columbia & Augusta 2ds, 111½; Raleigh & Augusta 6s, 125; Colorado Southern 4s, 93%; Western Maryland 2d 4s, 75; Baltimore City 3½s, 1928, 103; Brooklyn Rapid Transit, 82%; Alabama Consolidated Coal & Iron 5s, 92½; Richmond & Danville debenture 5s, 111½.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended June 13, 1906.

Railroad Stocks. Par. Bid. Asked.

Atlantic Coast Line of Conn.	100	352½	360
Georgia Southern and Florida	100	90	99
Georgia Sou. & Fla. 1st Pref.	100	90	85
Georgia Sou. & Fla. 2d Pref.	100	25	30
Maryland & Pennsylvania	100	106	106
Norfolk Railway & Light	25	18	19
Seaboard Company Common	100	31	31½
Seaboard Company 1st Pfd.	100	88	90
Seaboard Company 2d Pfd.	100	60½	60½

Bank Stocks.

Citizens' National Bank	10	28	28
Com. & Far. Nat. Bk., Blue Cts	100	140	160
Drovers & Mech. Nat. Bank	100	240	240
Farmers & Mer. Nat. Bank	40	51	55
German-American Bank	100	106	106
Maryland National Bank	20	23½	23½
MERCHANTS' NATIONAL BANK	100	181	186
National Bank of Baltimore	100	120	120
National Bank of Commerce	15	25	25
National Marine Bank	30	38½	39
National Union Bank of Md.	100	110	120
Old Town Bank	10	11	10
Western National Bank	20	38	40

Trust, Fidelity and Casu-

ally Stocks.

American Bonding & Trust	50	41	50
Continental Trust	100	185	196
Fidelity Trust	100	20	215
International Trust	100	149	155
Maryland Casualty	25	55½	56
Mercantile Trust & Deposit	50	145	145
Title Guarantee & Trust	100	122	122

Miscellaneous Stocks.

Ala. Con. Coal & Iron Pref.	100	91	94½
Consol. Cotton Duck Com.	50	12½	13

MANUFACTURERS' RECORD.

Railroad Bonds.

Atlan. Coast Line 1st Con.	48	99%	100%
Atlan. Coast Line 4s, Cts	100	91½	92
Atlan. Coast Line (Conn.)	50	110	...
Atlan. Coast Line (Conn.)	48	91	94
Carolina Central 48, 1949	97½
Char. Col. & Aug. 1st 5s	100	117	...
Char. Col. & Aug. 2d 7s	100	111	113
Coal & Iron Railway 5s	1920	105½	106%
Columbia & Greenville 1st	68	1916	115
Florida Southern 4s	1940	96½	...
Georgia & Alabama 5s	1945	111%	112%
Georgia, Car. & North. 1st	68	129	111%
Georgia Pacific 1st	68	122	...
Georgia South. & Fla. 1st	58	1945	113
Maryland & Pennsylvania 4s	1951	94%	95
Petersburg, Class A 5s	1926	115	...
Petersburg, Class B 6s	1926	125	127
Raleigh & Augusta 1st	68	1926	121
Seaboard Air Line 4s	1850	88	88½
Seaboard Air Line 5s, 10-year	1911	101%	101%
Seaboard Air Line 5s, 3-year	100	104	...
Seaboard & Roanoke 5s	1926	110	...
Virginia Midland 3d 6s	1916	116	...
Virginia Midland 4th 3-4s	1921	110	...
Western Maryland new 4s	1952	86%	...
West. North Carolina Con.	68	1914	114
West. Virginia Central 1st	68	1911	108½
Wilmington, Col. & Aug. 6s	1910	104	...
Wilmington, Col. & Aug. 6s	1935	117	...

Street Railway Bonds.

Anacostia & Potomac 5s	1949	106	...
Atlanta Con. Ry.	5s	104	107½
Augusta Rwy. & Elec. 5s	1940	101	105
Central Ry. Con. 5s (Balto.)	1932	115½	115%
Charleston City Railway 5s	1922	106	...
Charleston Con. Electric 5s	1929	95	96
City & Suburban 5s (Wash.)	1948	105	...
Lexington Railway 1st 5s	1949	100	101½
Macon Rwy. & Litt. Con. 5s	1953	101	102
Newport News & Old Pt. 5s	1938	98	...
Norfolk Railway & Light 5s	1942	99	99½
Norfolk Street Railway 5s	1944	110	111½
North Baltimore 5s	1942	117	...
United Railways 1st 4s	1949	92%	92½
United Railways Inc. 4s	1949	73½	74½

Miscellaneous Bonds.

Alabama Consol. Coal & Iron 5s	92	96
Consolidated Gas 6s	1910	107
Consolidated Gas 5s, 1939	112	112½
Consolidated Gas 4½s, Cts	98½	99
G. B. & S. Brewing 1st 3-4s	63	63½
G. B. & S. Brewing 2d Incomes	38½	39½
Maryland Steel 5s	107	...
Mt. V. & Woodby Cot. Duck 5s	86½	87

SOUTHERN COTTON-MILL STOCKS

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending June 9.

Bid. Asked		
Abbeville Cotton Mills (S. C.)	96	97
Aiken Mfg. Co. (S. C.)	85	91
Anderdon Cotton Mills (S. C.)	104	106
Arkwright Mills (S. C.)	120	...
Augusta Factory (Ga.)	80	88
Avondale Mills (Ala.)	105	110
Belton Mills (S. C.)	100	110
Bibb Mfg. Co. (Ga.)	122	...
Brandon Mills (S. C.)	111	...
Cabarrus Cot. Mills (N. C.) new	120	130
Chadwick Mfg. Co. (N. C.)	102	...
Chiquola Mfg. Co. (S. C.)	95	100
Clifton Mfg. Co. (S. C.)	124	127
Clifton Mfg. Co. (S. C.) Pfd.	102	106
Clinton Cotton Mills (S. C.)	138	145
Columbus Mfg. Co. (Ga.)	99	101
Courtenay Mfg. Co. (S. C.)	100	...
Darlington Mfg. Co. (S. C.)	89	95
Eagle & Phenix Mills (Ga.)	125	126
Easley Cotton Mills (S. C.)	132	133
Enoree Mfg. Co. (S. C.)	90	91
Enoree Mfg. Co. (S. C.) Pfd.	100	102
Enterprise Mfg. Co. (Ga.)	96	92
Exposition Cotton Mills (Ga.)	200	...
Gaffney Mfg. Co. (S. C.)	89	90
Gainesville Cotton Mills (Ga.)	29	40
Granby Cot. Mills (S. C.) 1st Pfd.	59	64
Granby Cot. Mills (S. C.)	160	168
Greenwood Cotton Mills (S. C.)	98	...
Grendel Mills (S. C.)	110	115
Henrietta Mills (N. C.)	200	...
King Mfg. Co., John P. (Ga.)	97	108
Lancaster Cotton Mills (S. C.)	102	106
Lancaster Cot. Mills (S. C.) Pfd.	97	...
Langley Mfg. Co. (S. C.)	92	96
Laurens Cotton Mills (S. C.)	172	...
Limestone Mills (S. C.)	104	...
Lockhart Mills (S. C.)	100	102
Lockhart Mills (S. C.) Pfd.	97	100
Louise Mills (N. C.)	102	...
Louise Mills (N. C.) Pfd.	85	94
Marlboro Cotton Mills (S. C.)	73	90
Mayo Mills (S. C.)	165	185
Mills Mfg. Co. (S. C.)	100	...
Monaghan Mills (S. C.)	90	...
Newberry Cotton Mills (S. C.)	114	...
Norris Cotton Mills (S. C.)	107	115
Odell Mfg. Co. (N. C.)	88	...
Olympia Cot. Mills (S. C.) Pfd.	80	...
Orangeburg Mfg. Co. (S. C.) Pfd.	80	97
Orr Cotton Mills (S. C.)	104	105
Pacolet Mfg. Co. (S. C.)	180	...
Pacolet Mfg. Co. (S. C.) Pfd.	102	104
Pelzer Mfg. Co. (S. C.)	169	173
Piedmont Mfg. Co. (S. C.)	169	171
Poe Mfg. Co. (S. C.)	125	129
Raleigh Cotton Mills (N. C.)	99	104
Richland Cot. Mills (S. C.)	51	50
Saxon Mills (S. C.)	100	104
Sibley Mfg. Co. (Ga.)	64	68
Spartan Mills (N. C.)	145	151
Southern Cotton Mills (N. C.)	80	...
Springfield Mills (S. C.)	100	...
Trion Mfg. Co. (Ga.)	131	142
Tucapau Mills (S. C.)	160	165
Victor Mfg. Co. (S. C.)	116	120
Warren Mfg. Co. (S. C.)	97	99
Warren Mfg. Co. (S. C.) Pfd.	105	107
Washington Mills (Va.)	18	26
Washington Mills (Va.) Pfd.	26	29
Whitney Mfg. Co. (S. C.)	143	150
Wiscassett Mills (N. C.)	122	135
Woodruff Cotton Mills (S. C.)	106	106½

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending June 9.

Bid. Asked		
Abbeville Cotton Mills (S. C.)	96	9

O. T., has been authorized to begin business with \$10,000 capital. A. H. Stout is president; C. J. Overstreet, vice-president; O. L. Scully, cashier, and A. W. Leonard, secretary.

The Farmers' Land & Loan Co. of Durant, I. T., has begun business with \$100,000 capital. The officers are Dr. Jas. L. Shuler, president; W. G. Short, vice-president; C. Hardin Smith, treasurer, and S. W. Stone, secretary.

The Merchants & Farmers' Bank of Louisville, Miss., is being organized with \$25,000 capital by P. H. Saunders, W. D. McRaven, S. M. Jones, George D. Russell and others. George D. Russell will be president and manager.

The Blaine National Bank of Kitzmiller'sville, Md. (P. O. Blaine, W. Va.), has been approved. The organizers are Howard C. Dixon of Westerport, Md.; Z. T. Kalbaugh, W. A. Shuey, Jacob W. Hughes, Jacob B. Shupe and others.

The Bank of Ninety-Six, at Ninety-Six, S. C., which was recently granted a commission, has elected the following directors: W. O. Self, W. B. Anderson, W. J. Holloway, R. S. Nickels, J. C. Self, D. H. Thompkins, H. P. Galphin.

The Goodnight State Bank of Goodnight, O. T., has begun business with \$10,000 capital; C. S. Fowler of Guthrie is president, with J. M. Graves, cashier; directors, C. S. Fowler, O. Mears, Ezra Clark, P. Morrison and John McMillan.

The First State Bank of McAlester, I. T., has organized with \$30,000 capital. The directors include Dr. LeRoy Long, president; J. C. Stalcup, cashier; A. J. Welch, Kirby Fitzpatrick and J. P. Donohue, cashier of the Bank of Lafontaine, Kan.

The First Savings Bank of Nashville, Tenn., has elected the following officers: Col. A. M. Shook, president; W. R. Cole, vice-president; D. C. Buntin, second vice-president; F. O. Watts, chairman executive committee, and P. D. Houston, cashier.

The First State Bank of Terrell, Texas, capital \$100,000, has begun business with the following officers: J. S. Turner, president; J. S. Grinnan, first vice-president; O. F. Walton, second vice-president; L. E. Griffith, Jr., cashier; E. H. Archer, assistant cashier.

Articles of incorporation for the People's Bank of Russell, I. T., capital \$25,000, have been filed by F. G. Overstreet, E. H. Ritchie, M. A. Russell, Campbell Russell, Mary F. Russell, J. K. McClaren, H. C. Wynne, S. J. Rogers, John Shinn and T. B. Harris.

The People's Bank of Heard county, capital \$25,000, has organized at Franklin, Ga., with J. E. Dunson of Lagrange, president, and Judge R. G. Crain, vice-president; directors, I. N. Orr, Jr., T. C. Lane, B. H. Tompkins, A. W. Powers and Col. D. B. Whitaker.

The Kinta State Bank of Kinta, I. T., capital \$25,000, has organized with the following officers: George E. Scott, president; Ernest Johnson, vice-president; Park Anderson, cashier. One of the principal stockholders is Green McCurtain, governor of the Choctaw Indian Nation.

The Continental Bank & Trust Co. of McKinney, Texas, has begun business with the following officers: J. W. Field, president; C. A. Sanford, cashier; directors, John H. Ferguson, J. W. Field, Frank E. Wilcox, Dr. W. Todd Largent, L. L. Elliott, Jesse Atkinson and Dr. C. T. Lewis.

The Bank of Lunenburg, Inc., has been chartered at Tinkling, Va., with \$50,000 capital. The incorporators are Joseph M. Hurt, first vice-president, Blackstone; L. W. Bridgforth, second vice-president, Tinkling; H. H. Seay, third vice-president; J. M. Harris, and G. E. Kennedy of Blackstone.

The Exchange National Bank of Fitzgerald, Ga., which is a conversion of the Exchange Bank of Fitzgerald, has organized with \$50,000 capital. The officers are Robt. V. Bowen, president; M. Dickson and James B. Clements, vice-presidents; E. W. Stetson, cashier; J. D. Dorminey, assistant cashier.

Mr. Edward T. O'Neal is reported as saying that the Gate City Bank, of which he is president, will begin business about July 15 in the new Frazier Building, 12th and McGee streets, Kansas City, Mo., with \$100,000 capital. W. H. Reed will be vice-president, and D. M. Pinkerton of Kansas City, cashier.

The First National Bank of Morehead, Ky., with which the Merchants and Planters' Farley National was merged, has begun business with \$1,000,000 capital. The officers are: President, A. M. Baldwin; vice-president, M. P. LeGrand; cashier, A. S. Woolfolk; assistant cashiers, Henry T. Bartlett and Emmett Seibles.

The Berlin Savings Bank of Berlin, O. T., has been chartered with \$10,000 capital. The incorporators are J. P. Thurmond and I. C. Thurmond of Elk City, E. K. Thurmond of Sayre, O. H. Thurmond of Erick, A. L. Thurmond of Foss, J. C. Hendrix and S. Jackson of Cheyenne.

The New State Building and Loan Association of Oklahoma City, O. T., capital \$200,000, has been granted a charter. The incorporators are J. S. and C. J. Alexander, L. B. C. Delaney, W. S. Guthrie, J. S. Lillard, J. O. Mattison, Harry C. Upsher, J. P. Martin, Thomas H. McConnell and Bryan Gordon.

The Bank of Beebe, Ark., is reported reorganized with \$25,000 capital. The officers are M. Strickland, Jr., of Bristol, president; C. A. Price, vice-president; Dr. E. H. Abington, cashier; N. H. Strickland, assistant cashier; directors, Ed. Olmstead, F. D. Worthington, G. H. Mills, M. Strickland, Jr., and H. N. Beam.

The Park Heights Boulevard Permanent Building and Loan Association has been incorporated with \$60,000 capital at Baltimore, Md., by Ernest Green, Joseph T. Flatt, Sr., Charles F. Grafflin, George W. Singer, J. Walter Galloway, Henry O. Hirschey, Joseph K. Hays, Benjamin A. Purks, David H. Whiteley and Sweetser L. Benson.

The Morehead Banking Co. of Morehead, Ky., has been incorporated with \$250,000 capital by H. E. Clark, Glen Campbell, Pa.; J. W. McCullough, Friendship, Md.; E. B. Carr, J. R. K. Scott, Philadelphia, Pa.; Dr. H. D. Heller, Hellertown, Pa.; C. D. Hottenstein, Sunbury, Pa., and J. H. Bradley and G. H. Elliott, Morehead, Ky.

The Yatesville Banking Co. of Yatesville, Ga., capital \$15,000, has made application for a charter. The incorporators are L. T. Matthews, Jas. E. McNeice, A. A. Crawford, Z. T. Crawford, J. H. Stewart, Jas. L. Mitchell, J. J. Fincher, B. H. Middlebrooks, T. J. Middlebrooks, J. A. Franklin, L. M. Johnson, W. M. Jackson, W. W. Hamrick, J. M. Clements, W. H. Gardiner and E. F. Tudor, all of Yatesville.

Articles of incorporation for the Reyno State Bank of Reyno, Ark., capital \$10,000, have been filed by S. C. Hancock, Ervin Reynolds, A. M. Reynolds, Ellen R. Reynolds, R. R. Reynolds, W. H. Reynolds, D. W. Reynolds, M. J. Reynolds, John L. Fry, F. W. Cox, S. A. Conner, B. F. Nance, H. L. Wilkins, J. W. Shaver, W. G. Jones, H. L. Sparkman, L. M. Cox, A. L. Jones, Leota Seymour, Cherokee Store Co., Theodore Rice and D. V. Cook.

The People's National Bank of Brunswick, Md., has begun business in the Murray Building with the following officers:

George H. Hogan, president; Howard Marvin Jones, vice-president, and Walter P. McComas, cashier; directors, George H. Hogan, H. Marvin Jones, J. T. Martin, Peter S. Hemp, Samuel W. George, Christian Smith, Charles R. Gregory, Dr. H. S. Hedges, Thomas Fitzgerald, L. E. McBride, Hamilton W. Shafer and W. F. Stonebraker. The bank has a \$25,000 capital.

The Southern Home Insurance Co. of Bartow, Fla., capital \$50,000, has been organized with the following officers: President: T. A. Goode; first vice-president, J. G. Boyd, president Polk County National Bank, Bartow; second vice-president, C. C. Chollar, cashier First National Bank, Arcadia; third vice-president, Baxton Small, Lake City; treasurer, E. L. Wirt, cashier Polk County National Bank; secretary, J. W. Sample; medical directors, Dr. F. M. Wilson and Dr. J. A. Garrard, Bartow.

New Securities.

Annapolis, Md.—Press reports state that no satisfactory offers were made for the \$250,000 of 4 per cent. refunding and public-improvement bonds, and that the issue has been withdrawn.

Baltimore, Md.—The directors of the Monticello Distilling Co. have authorized an issue of \$250,000 of 5 per cent. 20-year bonds, part of which will retire \$125,000 of 6 per cent. bonds and the balance used as working capital. The Mercantile Trust & Deposit Co., a local institution, has taken the entire issue.

Bay City, Texas.—The public-school fund of Matagorda county has been awarded at par the \$1995 of 4 per cent. 10-20-year Matagorda county bridge-repair bonds.

Bokchito, I. T.—The \$6500 of 6 per cent. 20-year school-building bonds have been purchased by R. J. Edwards of Oklahoma City.

Boynton, I. T.—On June 12 an election is to be held to vote on the question of issuing \$10,000 of school-building bonds.

Carnesville, Ga.—The city has voted to issue \$50,000 of Franklin county courthouse bonds.

Carrollton, Ga.—On July 9 an election is to be held to decide the question of issuing \$40,000 of 5 per cent. sewer, city hall and street-improvement bonds.

Cartersville, Ga.—An election is to be held June 16 to vote on the question of issuing \$25,000 of electric-light, \$10,000 of water-improvement and \$5000 of gas-plant improvement 5 per cent. 5-29-year bonds. Floyd L. Scales is mayor.

Clinton, Tenn.—The \$100,000 of 30-year Anderson county highway bonds have been purchased by the Kleybolt Bond & Investment Co. of Cincinnati at a premium.

Corsicana, Texas.—The city council is said to be considering the issuing of \$13,000 of school bonds.

Courtland, Va.—The \$5000 of 6 per cent. school bonds were not sold, and it is said that bids will again be received until noon June 15.

Easton, Md.—Bids will be received until noon June 19 for \$10,000 of 4 per cent. school bonds. Address Joseph B. Harrington, treasurer.

Edinburg, Va.—Press reports state that the \$20,000 of 4 per cent. 20-30-year water bonds were not sold June 7, and that bids will again be received until July 1. Geo. E. Irvin is chairman of the finance committee.

Elm Grove, W. Va.—An election is to be held June 21 to vote on the question of issuing \$18,000 of paving and sewer bonds.

Faxon, O. T.—Bids are now being received by E. B. Hungerford, district clerk, for \$4231.96 of 6 per cent. 30-year Comanche county refunding building bonds.

Forsyth, Ga.—On June 12 an election

TABLE OF CONTENTS.

EDITORIAL:	Page
Not In It.....	597
South Carolina's Recovery.....	597
New Passenger Stations Demanded.....	597
Magic-Lantern Sociology.....	597
Labor-Saving in Southern Industry.....	598
Boards of Trade.....	598

Answering Letters.....	599
------------------------	-----

Greater Wheeling.....	599
-----------------------	-----

The Cotton Movement.....	599
--------------------------	-----

In the Birmingham District.....	599
---------------------------------	-----

Building at New Orleans.....	599
------------------------------	-----

Builders' Exchange Exhibit.....	600
---------------------------------	-----

New Orleans Drainage and Sewerage.....	600
--	-----

Cold Storage.....	600
-------------------	-----

Activities in the Knoxville Section.....	601
--	-----

Hardware Men in Session.....	602
------------------------------	-----

Cotton-Oil-Mill Superintendents.....	603
--------------------------------------	-----

The Iron and Metal Trades.....	605
--------------------------------	-----

Houston to Galveston.....	605
---------------------------	-----

RAILROADS:	
New Railroads Planned.....	605
A Long Lumber Line.....	605
Rock Hill to Spencer.....	605
Atlanta, Griffin & Macon.....	605
Ashtabula Interurban.....	605
Texas Railway Contract Let.....	605
Burlington Improvements.....	606
Appointments.....	606
Expecting a Trunk Line.....	606
Texas & Pacific Improvements.....	606
May Adopt Electricity.....	606
Miona Springs Railway.....	606
Railroad Notes.....	606

MINING :	
Elkhorn Coal Fields.....	606
Coal and Clay Lands.....	606
Important Coal Enterprise.....	606
To Develop Coal Properties.....	606
Fuller's-Earth Deposits.....	606
Contemplated Copper Developments.....	606
To Represent Building-Supply Manufacturers.....	606

TEXTILES :	
Southern Knitting-Mill Betterments.....	607
Georgia Manufacturers.....	607
The Clara Manufacturing Co.....	607
The Peerless Woolen Mills.....	607
South Carolina Mill Men.....	607
A 10,000-Spindle Mill.....	607
Improvements for Knitting Mill.....	607
Cotton-Mill Site Offered.....	607
Proposed Spinning or Knitting Mill.....	607
The Blue Ridge Knitting Co.....	607
The Elizabeth Manufacturing Co.....	607
The McIntosh Mills.....	607
Textile Notes.....	607
Summer Tours by Sea.....	607

MECHANICAL :	
Golden's Foundry and Machine Plant (Illus.).....	608
Atlanta Steel Hoist Co.'s Plant (Illus.).....	608
Modern Portable Electric Hoists (Illus.).....	609
Positive Float Drive (Illus.).....	610

LUMBER :	
Distilling Turpentine.....	611
May's Building Record.....	611
Basket Factories for Vicksburg.....	611
To Locate at Malvern, Ark.....	611
Sold to Canadians.....	611
Ready to Fill Orders.....	611
Wants Desirable Location.....	611
Wants Pennsylvania Red Maple.....	611
Lumber Notes.....	611
For a Fertilizer Plant.....	611
Plans and Specifications.....	611

CONSTRUCTION DEPARTMENT :	
New Enterprises.....	612
Railroad Notes.....	616
Railroad Construction.....	618
Machinery Wanted.....	619
Industrial News of Interest.....	620
Trade Literature.....	622

FINANCIAL NEWS :	
Review of the Baltimore Market.....	623
Securities at Baltimore.....	623
Southern Cotton-Mill Stocks.....	623
Bank Conventions.....	623
New Corporations.....	623
New Securities.....	624
Financial Notes.....	626

is to be held to decide the question of issuing \$5000 of 6 per cent. telephone-system bonds.	
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Gail, Texas.—An issue of \$5000 of 4 per cent. 10-year Borden county road and bridge refunding bonds, approved and registered, have been purchased for the permanent school fund at par and interest.	
Galveston, Texas.—The school board is said to be considering the question of issuing \$25,000 of school bonds. This is the balance of \$50,000 authorized about 10 years ago.	

Girard, Ala.—A committee has been appointed, it is reported, to draft an ordinance providing for an election to vote on the question of issuing \$10,000 of school bonds.	
[For Additional Financial News, See Pages 36 and 37.]	

